

DISSERTATION
ON
“A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED
IMAGERY TECHNIQUE IN REDUCTION OF STRESS AMONG
ELDERLY PEOPLE IN SELECTED OLD AGE HOME, AT CHENNAI”.

M.Sc. (NURSING) DEGREE EXAMINATION

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CERTIFICATE

This is to certify that this dissertation titled **a study to assess the effectiveness of Guided imagery technique in reduction of stress among elderly people in selected old age home at Chennai** is a bonafide work done by **Ms. A. Anarkali**, II year M.Sc. Nursing student, College of Nursing, Madras Medical College, Chennai-03, submitted to the **TamilNadu Dr. M.G.R Medical University, Chennai**, in partial fulfilment of the university rules and regulations towards the award of degree of **Master of Science in Nursing, Branch V, Mental Health Nursing**, under our guidance and supervision during the academic period from 2014-2016.

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DISSERTATION ON

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*I raise my heart in gratitude to God Almighty. No one can lead a life apart
Untouched by others lives my life is not just my own design but Part of all the
rest that pass my way and each of them in part of mine*

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ABSTRACT

Title: A study to assess the effectiveness of Guided imagery technique in reduction of stress among the elderly people in selected old age home at Chennai.

Stress is the physiological or psychological tension that threatens homeostasis or a person's psychological equilibrium. It refers to the disturbances in physical, emotional and psychological well-being of people.

Need for the study

If the stress is not treated initially, it may lead to many complications like depression, suicide etc. Guided imagery technique aims to get people, particularly in elderly reduce stress, make people happier and more committed, as well as improve their interpersonal skills. So the investigator intended to do the study.

Objectives

1. To identify the socio demographic variables of the elderly people in selected old age home at Chennai.
2. To assess the stress level before guided imagery technique among elderly people in selected old age home at Chennai.
3. To evaluate the stress level after guided imagery technique among elderly people in selected old age home at Chennai.
4. To determine the effectiveness of the guided imagery technique.
5. To find association between post-test variables with selected demographic variables.

Methodology

Approach: Quantitative approach.

Study Design: Pre experimental one group pretest posttest design was used.

Study setting: Vishranthi Home for aged and destitute women, Palavakkam, Chennai.

Sampling technique: Non-probability convenient sampling technique (n=60).

Data collection procedure: Pre-existing level of stress among the elderly female was assessed by structured DASS questionnaire. They were divided into two

groups. Each group contained 30 people. They were again sub divided into 6 group, 5 members in each group. Guided imagery technique was practiced by the investigator. On the 14th day post-test was done by using the same questionnaire. Then continued the same for next 30 participants.

Data analysis

Demographic and clinical data were analysed with descriptive statistics (frequency, mean, percentage and standard deviation) and inferential statistics (chi-square and paired 't' test).

Result:

The result on post- test showed significant reduction in stress. The overall pre-test stress score among elderly people was 63.7% whereas in post-test it was 31.7%. So the significance difference between pre-test and post- test stress score was 32.0%. The difference between pre-test and post-test was analysed by using paired t-test and percentage with 95% CI.

Discussion:

Guided imagery is a simple and convenient relaxation technique that can help to manage stress quickly and easily. The above finding revealed that Guided imagery technique was effective and helped the elderly people to reduce their stress level. The hypothesis was proved.

Conclusion:

Stress can cause severe health problems and in extreme cases, it can cause death. The research findings demonstrated the positive impact of guided imagery technique on health among elderly females. The most appealing feature about guided imagery is anyone can use it irrespective of race, gender, age and education.

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LIST OF ABBREVIATIONS

Abbreviation	Expansion
OAP	Old age pension
χ^2	Chi square test
CI	Confidence interval
SD	Standard Deviation
DASS	Depression Anxiety Stress Scale
H	Hypothesis
R	Correlation co-efficient
P	Probability
DF	Degree of Freedom
N	Frequency
UNPF	United Nations Population Fund
TESI	Taiwanese Elderly people Stress Inventory
PTSD	Post-Traumatic Stress Disorder
HT	Healing Touch
GI	Guided Imagery
TAU	Treatment As Usual
ANOVA	Analysis of Variance
WHO	World Health Organization
RGI	Relaxation with Guided Imagery

CHAPTER – I

INTRODUCTION

Stress is the trash of modern life — we all generate it but if you don't dispose of it properly, it will pile up and overtake your life.

-Terri Guillemets (2010)

Human development is the process of growth and change that takes place between birth and maturity. There are stages of human development which includes infancy, childhood, adolescence, adulthood and old age. Mental health is important at every stage of human life. It includes our emotional, psychological and social wellbeing. It affects how we think, feel and act. It also helps to determine how we handle problems relate to others and make choices.

-mentalhealth.gov (2010)

Mental health is also a level of psychological wellbeing or an absence of a mental disorder. It is a psychological state of someone who is functioning at a satisfactory level of emotional and behavioural adjustment. It includes an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience – **www.wikipedia.com**

The current population of India in July 1, 2015 at 1.29 billion, the current population of Tamil Nadu in July 1, 2015 at 72,147,030, the current population of Chennai is 4,828,853. India is the second largest country in the World in terms of population by 2030, the population of India will be around 1.53 billion. WHO estimates, 10% of the world's population has some form of mental disability and 1% suffers from severe incapacitating mental disorder. Elderly more than 65 years is growing at a faster rate compared to other classes of people below 65.

Modern life is full of hassles, deadlines, frustration and demands. For many people stress is not always bad. In small doses, it can help us perform under pressure and motivate us to do our best. But when we are constantly running in emergency mode, our mind and body pay the price. If we frequently find our self-

feeling frazzles and overwhelmed, it is time to take action to bring our nervous system back into balance. We can protect our self by learning how to recognize the signs and symptoms of stress and taking steps to reduce its harmful effects.

Stress is a universal experience. Stress is a part of being alive. Right from the time of birth till the last breath drawn, an individual is invariably exposed to various stressful situations. Responses to stress are indispensable to our survival as they allow us to maintain the internal equilibrium necessary for optimal function. Stress is a physical or emotional state always present in a person as a result of living - **Hans selye (1976)**

Stress is unique in the causation of diseases. It has no biological carriers such as germs or viruses. Stress and its action result in behavioural responses and conflicts leading to aggressive behaviour for stress reduction, stress affects the body in a variety of ways. Stress is related to several chronic medical conditions. The phrase “*silent killer*” best describes stress. **(Mathar 2009)**

Old age statistics by World health organization (2015) estimated that, **worldwide** 121 million people were currently suffering from stress.

- In India, there are 76 million elderly people constituting 7.7% of the total population. With current demographic trends it is estimated to reach 21% by the year of 2050.
- In this, male are 27258259 and female are 30,031,289 (2014). It would be projected to increase 17.3 core in 2026. The life expectancy has increased from 24 years in 1900 to 42 years in 1960 and 53 years in 1971 to 58 years in 1981. It is projected to reach around 70 years by 2025.
- According to statistical info (2015),
 - In Tamil Nadu, the elderly population were approximately 77 million in census 2001. Old age dependency ratio will go up from 13 % in 2000 to 32.8 % in 2050.
 - In **Chennai** 4.36 to 7.81 % was the increased percentage in elderly population.

According to **Hansberg (2008 p.17)** “Ageing is defined to mean periodic change in human life which means man and the conditions, he is subjected to are constantly changing as time passes”.

Family structure is changing to nuclear and small unit families without safe, secure and dignified status in the family. The elderly are finding themselves vulnerable. Aging is a natural and gradual process except under extreme circumstances such as stress or grief- **Indian council of medical research (2006)**

Old age population suffers both physical as well as mental changes in life. Biological or bodily changes, loss of partner, change in family structure and role, economic dependency, all which contributes to the mental health problems. Stress management is the need of the hour. Geriatric nursing synopsis from stressing us out and plaguing us with anxiety attacks. -**Manju Nandhi (2010).**

There is need to prevent stress in the starting stage itself. There are various techniques available to relieve stress: meditation, guided imagery, self-hypnosis, yoga, exercises, music therapy, laughter therapy, relaxation techniques e.g. head to toe relaxation, and relaxation through aerobic exercises, play with pet, curl up with a good book, work in garden, spend time in nature, watch comedy, go for a walk etc. (**Wikipedia 2011**)

Complementary therapies also can help to restore the body's natural equilibrium and balance. Complementary therapies can boost the immune system, help to eliminate toxins, relieve pain, improve circulation, improve sleep patterns, increase energy levels, induce deep relaxation, reduce stress and tension and restore balance to body systems. Complementary therapies are used as a “complement” or adjunct to conventional medicine and often in addition to medication to obtain better control of symptoms and for relief from side effects which May medications might trigger. (**Eller 2008**)

Guided imagery is the use of visualizations, words, and/or music to evoke positive images in order to benefit a person. Guided imagery is more than just visualizing something you want or imagining things a different way; it is a process of using the connection between body and mind to bring about positive

changes in yourself. The practice of guided imagery may be useful in treating Stress. **(Brian Krans 2013)**

In mental disorder, Stress is the major important factor which affects the majority of elderly people. Geriatric psychiatry is concerned with preventing, diagnosing and treating psychological disorders in elderly adults. There are many psychotherapies and psychopharmacologies available for the management of stress but the Guided imagery technique is the best for all. It produces an amazing positive effect in the human body which is a self-help therapy and cost nothing which can be done anywhere and also improve the social skills of the individuals who involve in it.

1.1 Need for the study

According to report of United Nations Population Fund (UNPF) 2012, India has around 100 million elderly at present and number is expected to increase 20% in 2050.

The responsible factor is more connected with increase in life expectancy and decline in number of children being given birth to in a year. **(Plank et.al.2009).**

From 2004 onwards, October first has been celebrated as “world elder’s day”. So, elderly citizen are in need for urgent attention.

Situation analysis of elderly in India (2011) reported that by 2026, India’s population above 60 years will be double in size between 2001 and 2026, the elders will account for 12.17% of overall population in 2026.

The world Fact book of **Central Intelligence Agency (2011)** as of July 12, 2011 the life expectancy of birth in India is 66.8 years.

The changing demographic scenario and population projection of India indicates that the growth rate of Indian Older Adults faster than other regions of the world.

An article was written on the travails of a greying nation mentioned that India is an example of a developing country, which lacks organized services for

the elderly in the health, social or economic sectors. The health services available for the elderly in India are generally contained within the health services for the general population, without any special or specific initiatives for this group. It is estimated that 45% of the elderly have chronic disease and disabilities. One among this disease is *stress*. So specialized geriatric is necessary.

Major reason for old age persons to join old age home is to meet basic needs (50%) and negligence rejection by family members (40%) based on the study conducted by the *Department of Human Development and Family studies, Haryana agricultural University, Haryana*. Psychological stress among them is high. So, Stress among the old age home residents is high.

At present there are 1281 **old age homes in India**- Directory of old age homes in India (2013).

The Journal named Nurses of India; Bangalore celebrated April 2008 as *“Stress awareness month”* So, it is necessary to reveal the stress among the old age clients and some technique to solve this problem.

Stress becomes a significant part of the health care environment. While many traditional stress management techniques may be effective. Guided Imagery is a naturally occurring phenomenon and it helps us make sense of understand and cope with reality as serves as nature’s bio feedback and stress control system. It plays an important role in stress management and it should be recognized and encouraged.

Guided imagery therapy or Visualization is an alternative therapy that is

- ❖ non-invasive
- ❖ drug free
- ❖ can be practiced easily to ease chronic stress,
- ❖ speed the healing process

Guided imagery creates a bridge between mind and body, linking perception, emotion and psychological, physiological and behavioural

responses. Guided imagery technique has been categorized as a behavioural training or a cognitive technique in which the individual exerts active control over the focus of attention. It begins with obtaining a level of peace through relaxation, and then shifts the attention away from the stressful environment to a relaxed terrain of imagined place. **(Dr. Charilton 2010)**

The investigator had many opportunities to interact with the elderly people and realized that they were severely stressed. Many remedies are available for stress reduction. The effective one is Guided imagery technique. The literature review provided the investigator an interest and an indepth knowledge about guided imagery therapy. The investigator in order to gain skill in the therapy underwent training and also felt that this therapy can be practiced after simple instruction and there was no need for the presence of therapist always.

Since the investigator belongs to post graduate in psychiatric nursing interested to provide Guided imagery technique to the elderly people with a view to assess the effectiveness in reducing stress. The investigator also believed that if the stresses of elderly people are addressed adequately it may prevent the ill effects of stress related health problems.

1.2 Statement of the problem

“A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home, at Chennai”.

1.3 Objectives:

- 2 To identify the socio demographic variables of the elderly people in selected old age home at Chennai.
- 3 To assess the stress level before guided imagery technique among elderly people in selected old age home at Chennai.
- 4 To evaluate the stress level after guided imagery technique among elderly people in selected old age home at Chennai.

- 5 To determine the effectiveness of the guided imagery technique.
- 6 To find association between post-test variables with selected demographic variables.

1.4 Operational definitions

Assess:

In this study it is an organized, systematic and continuous process of collecting data from elderly people having stress in selected old age home at Chennai.

Effectiveness:

It refers to determine the extent to which the guided imagery technique intervention has achieved the desired outcome as measured by DASS scale among elderly people.

Stress:

It refers any uncomfortable emotional experience of females, measured by structured standardized stress scale. It may be isolation, neglect, boredom, loss of control, lowered self-esteem, failing health, and economic insecurity.

Guided imagery technique:

Guided imagery is a therapeutic process that supports the imagination to positively impact temperament and serve as a catalyst towards positive outcomes. The goal of guided imagery is to stop negative thoughts and focus on images that enable individuals to relax and decrease the negative impact of stressors.

Guided imagery was given by the investigator by using various scripts or concepts of imagination for 15- 30 minutes, once a day for a period of 14 days.

For example: Guided imagery of beach visualization, forest visualization, candle visualization relaxation, floating on a cloud, peaceful place, peaceful meadow, starry sky, summer clouds visualization, peaceful waves, wild life sanctuary, water meditation, music imagery, public speaking visualization.

Female elderly people:

It refers to the female elderly people between the age group of 60 and 70 years who were residing at selected old age home at Chennai.

Female old age home:

It refers a social welfare organization which takes care of elderly especially orphaned females and widows etc.

1.5 Assumptions

The researcher assumes that

- Female elderly people have some stress during the stay at old age home.
- Female elderly people reduced their stress by adopting guided imagery technique.
- Information provided by the old age home residents would represent their true stress.
- Level of stress varies from individual to individual
- Guided imagery technique helped to improve the relaxation of old age home residents.
- Guided imagery technique helped to provide better nursing care to the clients.

1.6 Hypothesis

H₁: There is an effectiveness of guided imagery technique among elderly females in selected old age home at Chennai.

H₂: There is a statistically significant association between the post-test stress scores with selected socio demographic variables.

1.7 Delimitations

The study is delimited to:-

- Female elderly in the age group of 60 – 70 years.
- Data collection period 4 weeks.
- Sample size of 60 female elderly.

1.8 Scope of the study:

The study identified the level of stress of elderly people. The study identified the factors those contributing to stress. These factors may be modified and minimized by the elderly people in the future. The study also proved the effectiveness of guided imagery technique in reducing stress. Hence the technique can be used by the elderly people in reducing their stress. The other members who are not included in the study may learn about the technique by interacting with the participants.

The study will help the health care professional to deal with variety of problems in day to day practice. This technique can be adopted for stress reduction among patients in the clinical settings and rehabilitation centres.

CHAPTER II

REVIEW OF LITERATURE

2.1 – Review of Literature

- 2.1.1 -Literature related to incidence and prevalence of stress among elderly.
- 2.1.2 Literature related to guided imagery therapy and effectiveness on stress.

2.2- Conceptual framework

2.1.1 Literature related to incidence and prevalence of stress among elderly

Kee- Lee Chout and Iris Chi (2015) conducted a longitudinal study to examine stressful events and symptoms among old women and men in Hong Kong. This study examined the impact of a series of common stressful life events (SLEs) on changes in symptoms among the older people. The respondents were 260 people aged 60 to 70 years or older. Using multiple regression models, the authors found that, of eight SLEs examined, only widowhood was associated with stressful and depressive symptoms three years later, even after controlling socio demographic, physical health status, and social support variables were applied. Finally, we also found a close relationship between number of SLEs and stress.

Jariwala vishall (2012) conducted a cross sectional study on the elderly people belonging to different socioeconomic and varying demographic groups of Surat city. A total of 105 elderly people were interviewed comprising of 35 people each from the elderly living in old age home, in the affluent areas and of those living in slums of city. A probability sample was obtained by approaching all the subjects in a consecutive manner. The prevalence of stress was moderately high 39.04% among the elderly in their study population and it was observed that several important socio demographic variables had shown a significant

association with stress in the elderly. The study revealed that there would be 6% to 50% prevalence rates on stress in the elderly community samples of the elderly in India.

Nilamadhabkara and AnkuBarua (2010) investigated a study to compare stress disorders in elderly adults and younger adults with major stress disorders and psychotic features. It was a cross sectional study of 250 persons in which 142 was above 60 years and 117 were within 18-59 years. The investigator assessed that the elderly adults has 73.3% of major stress disorder and 26.7 % of psychotic features whereas the young adults has 50.9% of major stress disorder and 49.1% of psychotic features. The findings of the study were consistent with those of community based epidemiologic survey that stress disorders are as much as prevalent in elderly adults than younger adults.

Lefrancois.R.et.al. (2010) conducted study on, Stressful life events and psychological distress of the very old in Canada. The purpose of the study was to examine whether social support has a moderating effect on the relationship between exposure to stressful life events and psychological distress. To test this, 224 men and women aged 81-86 were sampled from two municipal regional countries. The French version of the Geriatric Scale of Recent Life Events, the Psychiatric Symptom Index, and the social provision scale were used. The results show that the negative aspect of social interaction may explain why social support did not have a protective effect. Also, social isolation resulting from psychological distress could reduce the opportunity for instrumental help and emotional support.

Hema,(2010) conducted a study to assess the effectiveness of selected relaxation techniques to reduce the level of stress among senior citizens residing in selected old age home, at Coimbatore. The pre experimental design was used for the study and 60 senior citizens. Modified stress assessment rating scale, which was used before and after structured teaching program. There is significant difference between pretest and posttest stress score ('t' value=23.715, $p < 0.05$).

The Mean score of pretest and posttest level of stress were 83.25(SD± 11.75) and 49.6 (SD± 10.09). Results of inferential statistics (chi square value $X^2 = 23$, $p < 0.05$) identified that dis-satisfaction (or) lack of support system is the major predictor of distress among senior citizens living in old age home.

Charles A Walker and Linda Box Curry A (2010) A study was conducted in rural and urban areas of Vellore regarding dependent, independent and related health needs and problems of the elderly on 200 respondents. This study revealed that 78.5% were depressed due to loneliness and poverty. Charles A Walker and Linda Box Curry identified that “Relocation stress syndrome” is a nursing diagnosis characterized by symptoms such as anxiety, confusion, fear, helplessness, indecisiveness, suicidal thoughts and suspicion, hopelessness and loneliness. It usually occurs in older adults shortly after moving from a private residence to nursing home or assisted living facility. This study indicated that the relocation stress syndrome may be overestimated.

F.A. McDougall (2009) conducted a study to determine the prevalence of stress and the influence of demographic characteristics of the symptoms in the elderly people residing in rural Taiwan. And also the association was explored between stress disorders and life stressors in the Taiwanese elderly people. Stress inventory (TESI) was used as a tool. A cross sectional design utilizing face to face administration of tool was made. A total of 195 elderly community residents participated in this study. Levels of stress were measured by stress inventory and 57% of the subjects scored 7 indicators that the majority have severe stress.

David M. Almeida., (2009) conducted study on Resilience and Vulnerability to Daily Stressors Assessed via Diary Methods Research on daily stressors has benefited from diary in Pennsylvania. Which used a telephone-diary design, highlight how people’s age, gender, and education and the presence or absence of chronic stressors in their lives predict their exposure and reactivity to daily stressors. Respondents reported experiencing on average at least one stressor on 40% of the study days and multiple stressors on 10% of the study days. Approximately 30% of the reported stressors involved some sort of loss

(e.g., of money), nearly 37% posed danger (e.g., potential for future loss), and 27% were frustrations or events over which the respondent felt he or she had no control.

Philip. O. Sijuwade (2009) conducted a study to assess that level of mental health among the residents in an old age home at Calcutta, India. Out of total of 60 residents, 26.6% had very poor mental health level and majority 48.3% had a poor level of mental health. The same study revealed the main psychological problem among old age home residents. Frustration was experienced by 67.2%, feeling of insecurity was experienced by 76.4% and loneliness by 54%. The majority 76.6% of the subjects were females and the commonest reason for 40% of them joining in the old age home was “not to be a burden of family members”.

Darryl R. Haslam., (2009) conducted study on the practice patterns and attitudes on guided imagery technique. There were 442 responses, the sample was predominantly female (88.4%) As far as ethnicity (n=294), the sample was largely White/Caucasian therapists (89.5%) with relatively few from other ethnic or cultural backgrounds. The mean age for the sample was 65 years (SD= 11.7) and a range of 60 to 70 years. Most participants (79%) were between ages 60 and, with the largest age range being those in their 50s (30.0%).

Mark A, Murrell, Stanley A (2009) conducted a discriminant analysis to assess the impact of psychological and physical health, stressful events and social support among elder people. Factors that influence mental health help seeking among adults 60+ yrs. were examined prospectively. A 120 older adults needing and seeking services and a comparison group of 120 older adults not needing services. Prior to having sought help, help seekers demonstrated poorer psychological well-being, reported more physical health problems, reported a higher level of unpleasant stressful events, and perceived greater deficits in the amount of social support available to them in time of need. Significantly more help seekers than no seekers experienced stressful events involving bereavement, social and economic loss, and new physical illness.

Nandiet.al. (2008) epidemiological survey revealed at rural population in Calcutta found that 24.1% of subjects are aged between 60 and above suffered with stress. Ramachandran (2008) in a Gero psychiatric community survey in a sub urban population near Chennai found that 24% of the community people suffered with stress and that is the most common psychiatric disorder in the elderly people. Venkoba Rao et al 2008 in their Gero psychiatric morbidity survey in a semi urban area of Coimbatore found that stress and depressive illness contribute to 67% of the total psychiatric morbidity in the elderly population.

Patty pits (2008) conducted a study to assess the stress level among elderly people. 55 elderly people included in this study. It show that more than 70% of illnesses related to stress including high blood pressure, heart diseases, depression, anxiety and psychosomatic disorders. The treatment of mind related diseases is aided by the earliest form of meditation. Many studies show that stressful life situations generate changes, complexities and challenges to which the individual cannot respond adequately. Finally it leads to illness. To get relief from stress, number of interventions was carried out. Among these guided imagery is considered as the best one as it needs no specific preparation.

Tak, Sunghee H., (2008) conducted a study on stress in individual results revealed six sources of stress in the daily life of the participants: health, routine tasks, family issues, financial management, social relationships, and living conditions. Three major strategies of coping with daily stress emerged: cognitive efforts, diversional activities, and assertive actions. Participants reported a wide range of support resources to deal with daily stress. A study was conducted in rural and urban areas of Vellore regarding dependent, independent and related health needs and problems of the elderly on 200 respondents. This study revealed that 78.5% were depressed due to loneliness and poverty.

Karin Holmen, Hidotochi Furukawa (2011), conducted a longitudinal study to examine the loneliness, health and social network among elderly people, to describe loneliness, subjective health and social network among elderly people during a period of 10 years. The study is based on interviews with persons, aged

55 years and over, performed by trained nurses at a baseline and three follow-ups. Descriptive statistics and χ^2 tests were used to study significant differences of the variables experienced loneliness, subjective health, housing, satisfaction with friend contacts and having a good friend to talk to, over time. The results showed that most elderly people tended to report high satisfaction with friend contacts over the study time, despite the decrease in having a good friend to talk to. The satisfaction with social contacts was very close connected with feelings of loneliness.

2.1.2 Literature related to beneficial effects of guided imagery therapy on stress:

Salzer, J, R.J. Ruiz and E. French (2015) conducted a cohort study to gain an in-depth understanding of guided imagery in stress management in pregnant African American women by randomized controlled trial. The 12 week intervention was a professionally recorded compact disc with four tracks developed and sequenced to reduce stress and associated symptoms. The findings from this descriptive phenomenological study were derived from daily logs and interviews from 36 participants randomized to the CI group. Participants described the stressful nature of their lives. Results demonstrated as beneficial in reducing stress and the associated symptoms.

Charalambous.A, Nicosia, Cyprus (2015) conducted a randomized controlled trial to assess the effectiveness of guided imagery as stress reducing interventions in Women's Health. Patients were observed for 3 weeks and assessed with the SAS and BECK-II questionnaires, 256 patients were registered and 236 were randomly assigned. Intervention's mean stress score and depression score changes were significantly different compared to the control's ($b = -29.4$, $p < 0.001$; $b = -29.4$, $p < 0.001$, resp.). Intervention group's cortisol levels before the intervention (0.30 ± 0.25) gradually decreased up to week 3 (0.16 ± 0.18), whilst the control group's cortisol levels before the intervention (0.21 ± 0.22) gradually increased up to week 3 (0.44 ± 0.35).

Gonzales, Eric A, Ledesma, Rachel J A, et al. (Jun 2015) conducted a study to assess the effects of guided imagery on postoperative outcomes in patients, a randomized, Single-Blind Study in Canada. Randomly the 44 adults were assigned into 2 groups. Stress, Anxiety and baseline pain levels were documented preoperatively. Both groups received 28 minutes of privacy, during which subjects in the experimental group listened to a guided imagery compact disk (CD), but control group patients received no intervention. Data were collected. The change in stress levels decreased significantly in the guided imagery group ($P = .002$). The use of guided imagery in the ambulatory surgery setting can significantly reduce preoperative stress and anxiety which can result in less postoperative pain and earlier PACU discharge times.

Marisa H. Loft & Linda D. Cameron, (2013), conducted a randomized, controlled trial testing to assess the efficacy of guided imagery technique, in California, by applying self-regulatory theory. Randomly assigned 104 business employees to four imagery-based interventions. Participants practiced their techniques daily for 21 days. They completed online measures of sleep quality, behaviours, and self-efficacy at baseline and Day 21 and daily measures of sleep behaviours. Participants using imagery exhibited greater improvements in self-efficacy, sleep behaviours, sleep quality, and time to sleep relative to participants using arousal reduction and control imagery. Self-regulation imagery techniques show promise for improving sleep behaviours.

Rohini Terry (2013) conducted a study to evaluate the effects of guided imagery on stress and fatigue in patients undergoing radioactive iodine therapy after thyroidectomy in Korea. Participants were 84 individuals with thyroid cancer. The experimental group listened to a guided imagery CD once a day for 4 weeks. Global Assessment of Recent Stress and Revised Piper Fatigue Scale were self-administered. There were significant decreases in stress ($F = 28.45$) and fatigue ($F = 26.17$,) over time in the experimental group compared to the control group. From the results of this study guided imagery can be recommended as an effective intervention to thyroid cancer patients with stress and fatigue.

Chen, Guanghua, Shen, Huizhang (2012) conducted a cross-sectional study on Posttraumatic Stress Disorder among Elderly Qiang Citizens 3 Years after an earthquake in China to determine the prevalence and to identify the associated risk factors among elderly citizens. A survey of 287 respondents aged 60 years and older were conducted to collect data. PTSD was assessed according to the Clinician-Administered PTSD Scale. The prevalence of PTSD was 22.65%. Being female, being widowed, having a low level of education, having low monthly income, suffering bodily injury, being bereaved, and having a low level of social support were risk factors significantly related to the development of PTSD. The results indicate that PTSD remained at an elevated level among elderly

Jenkins, Margo Youngberg (2012) conducted an evidence based application of guided imagery and its impact on resilience and stress in Military nurses at risk for PTSD. A pre-test/post-test intervention feasibility study. Each guided imagery session lasted not more than 30 minutes and was administered from a pre-recorded compact disc. A Wilcoxon Signed Rank Sum Test revealed a statistical improvement in resilience ($z=-2.938$, $p<0.003$, $r=0.54$) and perceived stress ($z=-2.990$, $p<0.003$, $r=0.54$) and a reduction in PTSD symptoms ($z=-3.219$, $p=0.001$, $r=0.59$) following the participation in the GI sessions. GI can be translated into an intervention for improved resilience, improved stress management and decreased risk for PTSD symptoms for military nurses in the occupational setting.

Jain, Shamini, George Madelyn P, Valencia et al. (2012) Conducted a randomized controlled study to determine whether a complementary medicine intervention of healing touch with guided imagery for PTSD symptoms. Active duty military ($n = 123$) were randomized to 6 sessions (within 3 weeks) of HT+GI vs. TAU. The primary outcome was PTSD symptoms; secondary outcomes were depression, quality of life, and hostility. Participation in a complementary medicine intervention resulted in a clinically significant reduction in PTSD and related symptoms in a returning, combat-exposed active duty military population.

Elsegood, Kelly J, et al, (2012) conducted a randomized controlled study to assess the effects of guided imagery on Affect, Cognition, and Pain in older adults in residential care from Thailand. This study aimed to evaluate the outcome of group-delivered guided imagery over a 16-day period with a sample of Thai older adults in residential care ($N = 31$). Residents were randomly allocated to the guided imagery treatment group or usual care control group. Significant differences were found between the two groups regarding affective states, cognitive functioning, or pain.

Nahid Dehghan – Nayeri and Mohsen Adib-Hajbaghery (2011) conducted a study to assess the effects of guided imagery on stress and quality of life of female dormitory students. A non-randomized controlled trial was conducted in 4 female dormitories of Tehran University. The students were randomly allocated to the experimental and control groups. The Spiel Berger inventory questionnaire were administered to both groups. Then the experimental group was taught to do the guided imagery technique for two months. A post-test conducted on both groups after two months. Significant differences were noticed between stress and quality of life of the two groups after the intervention. Guided imagery will improve the quality of life especially in the examination periods.

Giannakopoulou. E, Bozas and Paikousis. L (2011) conducted a quasi – experimental study to assess the effects of guided imagery on the level of stress experienced by Nursing Students New England. The State-Trait Anxiety Inventory instrument was used. The participants were surveyed three-times during the data collection period; prior to the start of the clinical semester; at the mid-term point and during the final week. The experimental participants were given a hyperlink to a 5-minute YouTube presentation which they were instructed to play prior to each clinical shift. Independent sample t-tests, ANOVA, and repeated measures testing were used to assess for significant differences in the participants' responses. This study is the foundation for future studies related to the effectiveness of guided imagery to assist nursing students in managing stress.

Menzies V, Jallo. N (2011) conducted a study to assess the effective of guided imagery as a treatment option in reducing self-reported fatigue. The electronic databases MEDLINE, CINAHL, Psych Info, Psychology and Behavioural Sciences Collection method was used. Findings were inconsistent regarding the effectiveness of guided imagery on fatigue. Standardizing guided imagery interventions according to total duration of exposure and targeted imagery in a variety of different populations adequately powered to detect changes will contribute to and strengthen nursing's symptom-management armamentarium.

Diane Joseph et al, 2009 a study was conducted by a cardiac team implemented a Guided Imagery program to compare cardiac surgical outcome between two groups of patients. A questionnaire was developed to assess the benefits of Guided Imagery program. These who are willing to take participate in the study were administered the questionnaire, Patients who completed the Guided Imagery program had a shortened average length of stay in the hospital; the cost of medicine was reduced. Overall the patients hold a high level of satisfaction with the care and treatment in Guided Imagery was considered a complementary means to reduce anxiety, pain and length of stay among cardio surgery patients.

Manday Doherty, Elizabeth (2008) A study was done on psychological techniques to boost the immune system among breast cancer patients - Guided Imagery was provided with progressive muscle relaxation, standard surgery, chemotherapy and radiotherapy. At the end of the 9-month study, these women also had a higher level of lymphokines, which help to prevent disease from spreads. The women reported a better quality of life.

Palmore, (2010), an article emphasized the uses of Guided Imagery in health care. It discusses how it can significantly reduce stress, pain, and side effects of treatments, blood pressure, headaches and strength immune functioning. Patients are encouraged to be active participants in their care. Patients, family members and staff have demonstrated positive benefits.

Hubbard RE, Eel's EM Fay S and Rockwood. K, (2009) A study was done on psychological techniques to boost the immune system among breast cancer patients - Guided Imagery was provided with progressive muscle relaxation, standard surgery, chemotherapy and radiotherapy. At the end of the 9-month study, these women also had a higher level of lymphokines, which help to prevent disease from spreads. The women reported a better quality of life

Ellser L (2008) conducted a study about using Guided Imagery for stress management among care givers. This study found that for the care giver imagery is an excellent addition to self-care regimen. It helped to manage stress, stay positive and motivated to maintain own health. It can also assist in releasing`+ the anger and stress that is often accompanied when a person is playing the role of a care giver in the family. Care givers can find tremendous benefits in their ability to cope with frustration and hopelessness that often accompanied long term care giving, the study averred.

Hilary A. Tindle, MD, MPH et al. (2008) conducted a randomized controlled trial to check the efficiency of guided imagery therapy for smoking cessation among smoking adults. Among the intervention 59% participants attended four of six guided imagery sessions, and 94% found the technique helpful for smoking cessation. Intervention participants had greater readiness to quit and lower state of anxiety at the end of treatment than the control group. A guided imagery program for smoking cessation was feasible, perceived to be helpful, improved intermediate measures and resulted in a trend toward smoking cessation.

Tramer, Beth A., (2008) conducted study on Geriatric Group Guided imagery technique in a Nursing Home in Canada explores the benefits of Guided Imagery during one and a half-hour weekly sessions in a nursing home. These well-received sessions focused on socialization, enhancing self-esteem, reminiscing, and creative decision making, while reinforcing manual and visual dexterity that guided imagery with the geriatric population has great promise as an alternative complementary therapy, worthy for further practice.

Carole Holden-Lund (2007) conducted a study to effects of Relaxation with Guided Imagery on surgical stress and wound healing. Twenty – four patients undergoing cholecystectomy were randomly assigned to either RGI or control (quiet period) conditions and measured against three indices of recovery: state of anxiety, urinary cortisol levels and wound inflammatory responses. An analysis of variance for repeated measures revealed that the RGI group demonstrated significantly less state of anxiety, lower cortisol levels the day following surgery, and less surgical wound erythema than the control group. Thus the RGI tapes demonstrated stress-relieving outcomes closely associated with healing.

Mare H. Kalmanson (2007), conducted a quasi-experimental prospective study to assess the effectiveness of guided imagery on pain perception in adult with chronic pain. The study was undertaken to demonstrate the effectiveness of guided imagery in the treatment of chronic pain. Chronic pain negatively impacts upon quality of life, self-image, job performance, and interpersonal relationships. Data were collected from a convenient sample comprising of 30 adult clients from 18 to 70 years of age from an outpatient treatment facility in Broward country Florida. This study revealed the use of guided imagery as a valid, reliable and cost effective adjunct in the treatment of pain.

Lisa K. Mannix. MP (2007) conducted a study to determine the effect of adjuvant guided imagery on patients with chronic tension-type headache. One hundred and twenty- nine patients with chronic tension – type headache completed the Head ache Disability Inventory and Medical Outcomes at their initial visit to a specialty head ache Centre and again one month after the visit. Patients listened to the guided imagery tape improved in head ache frequency, head ache severity, patient global assessment, quality of life, and disability caused by head ache. Patients who were subjected to guided imagery had significantly more improvement than the control subjects. So, guided imagery was proved to be an effective adjunct therapy for the management of chronic tension – type head ache.

Troesch LM, Rodehayer, (2007) conducted a study on the influence of guided imagery on chemotherapy – related nausea and vomiting. The purpose of the study was to determine if the addition of guided imagery to a standard antiemetic regimen decreased nausea, vomiting, and retching occurrence and distress in patients receiving cisplatin- based chemotherapy. A convenience sample of patients (N= 28) was selected from an oncologist's patient population and randomized into two groups. Both groups received the same standard antiemetic regimen, while the experimental group additionally used a chemotherapy – specific guided imagery audiotape. The guided – imagery group expressed a significantly more positive experience with chemotherapy.

James et al (2007) conducted a study to determine whether guided imagery in the pre-operative period could improve the outcome of colorectal surgery patients. Patients were randomly assigned in to one of two groups. Group I received standard pre-operative care, and group 2 listened to a guided imagery tape three days preoperatively; both groups had postoperative patient controlled analgesia. Guided imagery significantly reduced postoperative stress, anxiety, pain, and narcotic requirements of colorectal surgery and increased patient satisfaction. The study concluded that guided imagery was a simple and low-cost adjunct in the care of patients undergoing elective colorectal surgery.

Keegan L (2007) conducted a study about therapies to reduce stress and anxiety. He found that the staff working with the care givers of patients needed creativity in meeting their daily needs. He suggested that many alternative and complementary therapies including aromatherapy, hydrotherapy, humor, guided imagery therapy, massages, music and relaxation can be used successfully as adjunct therapies to help decrease stress.

Lynn C (2007) conducted a study on effectiveness of Guided imagery among twelve care givers of older females with dementia. They participated in a six session manualized guided imagery meditation designed to cope with stress. Pre/post comparisons revealed statistically significant reduction in stress, anxiety and improvement in self-efficacy. The study also revealed that the majority of

care givers found the intervention useful and reported subjective improvement in physical and emotional functioning.

2.2. CONCEPTUAL FRAMEWORK

Conceptual framework deals with concepts assembled together by virtue of their relevance to research problem which provides a certain frame of reference to clinical practice, research and education. The framework gives direction for planning research design, data collection and interpretation of findings.

Betty Neumann's health care system model.

The present study was intended to find out effectiveness of Guided imagery technique in reduction of stress among elderly people. The conceptual framework is based on Betty Neumann's health care system model. According to this model affords a total person approach (or) holistic client approach is given by providing the multidimensional view of a person as an individual. This model includes holistic client approach, open system, basic structure, environment, and stressors, line of defense and resistance, degree of reaction, three levels of prevention as intervention. Holistic client approach mainly focuses dynamic and constant interaction between client and environment. Betty Neumann's model focuses on stress and stress reduction is primarily concerned with the effect of stress on health.

BASIC CORE STRUCTURE

According to the Neumann's model the person has core circle consisting of basic structures. These basic structures encompass the factors necessary for client survival. These factors also includes physiological, psychological, sociocultural, developmental and spiritual

variable. Surrounding the basic core structure is concentric circle, which includes the line of resistance and line of defense. A solid line which is outside of the Line of Resistance is called Normal line of defense. It is an equilibrium state or the adaptation state that a client can make some adjustment to overcome the stressors. Flexible line of defense is a broken line which is outside of the Normal line of defense. It acts as a protective barrier to prevent stressors. It is dynamic and can change rapidly over a short time. The series of lines surrounding the basic core structure is called Line of resistance. It represents the internal factors of the person that helps defend against stressors. The degree of reaction is the amount of system instability occurs after the exposure to stressors. Neumann describes stressors as any environmental force and it include tension producing stimulus that has the potential to affect a person's normal line of defense. According to Neumann's there are some specific interventions like primary, secondary and tertiary prevention which is used to retain or maintain system stability.

ASSESSMENT

The internal and external forces can affect the client at any time which is considered as environment. It includes intrapersonal, interpersonal and extra personal factors. Stressors are any environment force that alters system stability. A person's reaction to a stressor is determined by natural and learned resistance which is manifested by the strength of the lines of resistance and the normal and flexible line of defense.

In this present study elderly people is viewed as an open system that is influenced by various stressors like age, marital status, religion, financial support, occupation, number of children, duration of stay etc. The elderly people is changing life style, family stress and emotional stress are considered as their environment. In the flexible line of defense, elderly people take the life changes as normal phenomenon. In the normal

line of defense, elderly people try to use coping mechanism to adjust with stressful situation. Elderly people again possess a line of resistance which attempts to stabilize the individual according to the ability to cope up with the problems. But when the stressors cross through the line of resistance due to the intensity, it may alter the basic structures and shows various stress reaction.

INTERVENTION

The goal of nursing is to keep the person healthy and stable. Specific interventions like primary, secondary and tertiary prevention are used to retain or maintain system stability. Primary prevention includes exercise regularly, relaxation, and ventilation of feelings, proper diet, social support, maintain positive feeling about us. Secondary prevention includes stress reduction by relaxation techniques, exercises, rest and proper diet, family and social support and, ventilation of feelings. Tertiary prevention includes re-habilitation like re-adaptation and re-education to prevent future occurrence and maintenance of stability. In this study the practice of Guided imagery technique is one of the relaxation techniques which are used as secondary prevention for reducing the level of stress.

EVALUATION

It is the end product of a system as a result of its process; it refers to decrease or maintain the stress among the female elderly and is measured by posttest.

RECONSTITUTION

It is a state of person system to adapt the stressor that is called as reconstitution. It includes stress reduction by meditation, thereby improving physical and mental health, boosting self-esteem and sense of well-being.

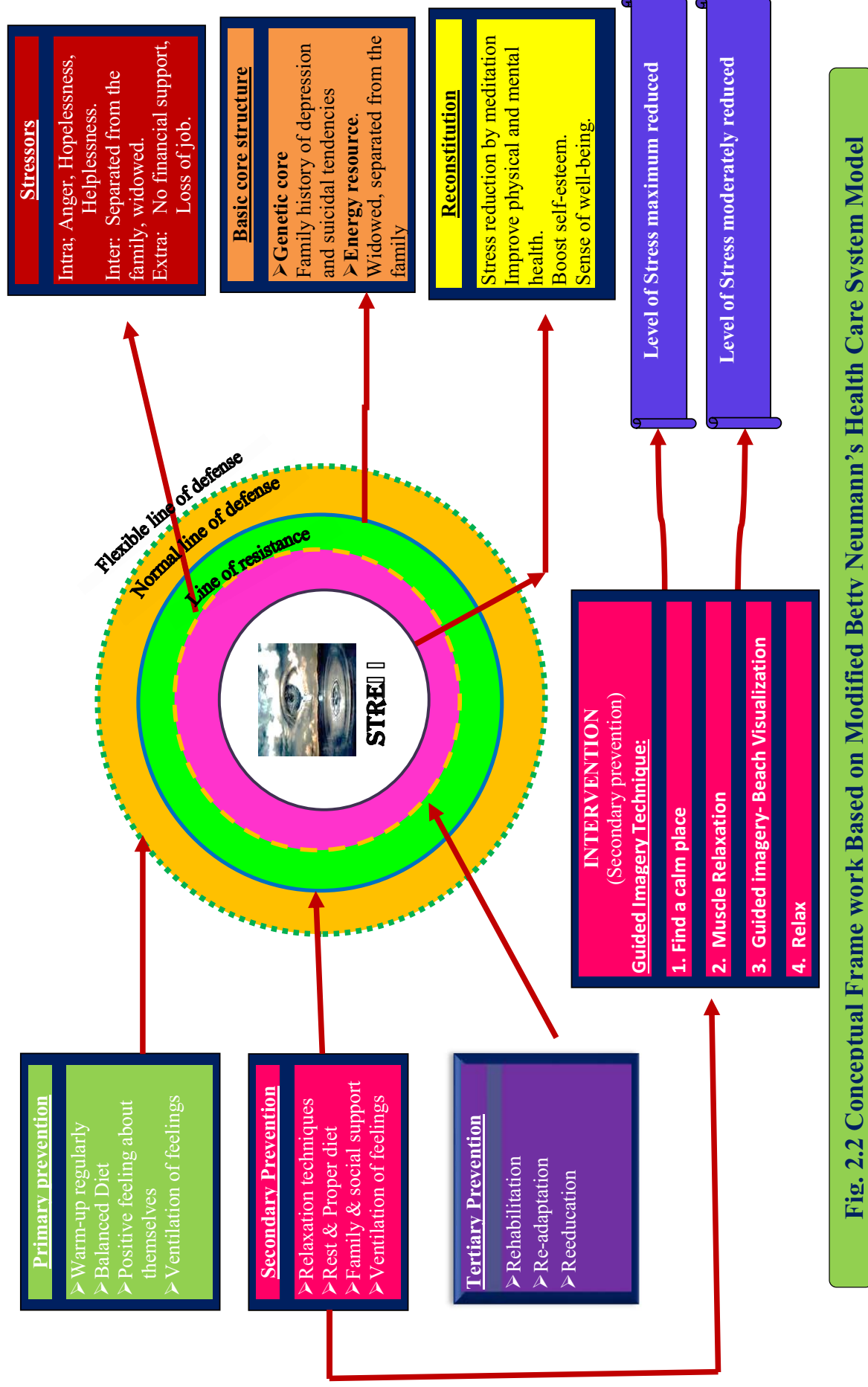


Fig. 2.2 Conceptual Framework Based on Modified Betty Neumann's Health Care System Model

CHAPTER III

METHODOLOGY

3.1 Approach

The research approach was selected as Quantitative approach to **assess** the level of stress among the elderly people and to evaluate the effectiveness of guided imagery technique.

3.2 Data collection period

The data collection period was four weeks from July 17th to Aug 16th 2015.

3.3 Study setting

The study was conducted at Vishranthi home for aged and destitute women at Palavakkam, Chennai. It was established in 1978 by Mrs. Savithri Vaithi and located in East Coast Road, Palavakkam, Chennai. Today Vishranthi hosts 175 women, 32 staff members apart from driver and watchman, there was no men. A.V. Meiappa Chettiyar donated the money for this acre of land in 1977. There was always work to do, people to help. They also dealt with death. They send their friends off with prayers and light their pyres....

These setting was selected on the basis of feasibility of the study and the availability of sufficient sample.

3.4 Study design

A pre-experimental one group pretest and posttest design was used. It involved the collection of data from the samples both before and after the intervention.

Schematic outline of research design

GROUPS	PRE-TEST	INTERVENTION	POST-TEST
One	O1	X	O2

O1- Pre assessment of stress level among the elderly people

X – Guided imagery technique

Intervention protocol:

Place : Vishranthi home for aged and destitute women

Intervention : Guided imagery technique

Tool : Depression Anxiety Stress Scale

Recipient : Elderly females

Duration : 15 – 30 minutes

Frequency : Once a day for 14 days

Administered by : Investigator

O2- Post assessment of stress level among the elderly people.

3.5 Study population

Target population

The target population of this study is the female elderly people.

Accessible population

The accessible population was the female elderly people who were staying in Vishranthi home for aged and destitute women at Palavakkam, Chennai.

3.6 Sample size

A sample of 60 female elderly people who met the inclusion criteria was selected for this study.

3.7 Criteria for sample selection

3.7.1 Inclusion criteria

- Female elderly people with stress in the age group of 60-70 years.
- Female elderly people who can understand and speak Tamil
- Elderly people who are available during the data collection period.
- Elderly people who are willing to give consent for the study.
-

3.7.2 Exclusion criteria

- who are seriously ill during the period of data collection
- Clients who had some other severe memory disturbances/psychiatric disturbances/ visual and hearing deficits.
- Elderly females who had previous guided imagery technique

3.8 Sampling technique

Non – probability convenient sampling technique was used to select the sample.

3.9 Research variables

There are two categories of variables discussed in this study:

Independent variable : Guided imagery technique.

Dependent variable : Level of stress among female elderly

3.10 Development and description of the tool

3.10.1 Development of the tool

Appropriate tool was selected by the investigator after extensive literature review from the various text book, internet search, guidance and discussion with experts in the field of medical, nursing, psychiatry and statistics. A structured questionnaire was used to collect data from the elderly who were staying in the Old Age Home.

3.10. 2 Description of the tool

The tool consisted of Section A and B

1) Section A: Socio – demographic profile

Socio-demographic profile consists of age, religion, marital status, education, occupation, financial support, and number of children, mode of admission, recreational activities and duration of stay.

2) Section B: Structured questionnaire

The structured questionnaire regarding assessment of stress based on three part Likert scale Part A : Depression level of elderly people

Part B : Anxiety level of elderly people

Part C : Stress level of elderly people

It covers the following domains of stress

- Meaning
- Physical symptoms of stress
- Negative emotional state of depression, anxiety and stress.

Scoring key

The questionnaire which was used to assess the stress level of elderly people consists of four statements and the score for them were dealt as given below.

Score	Statement
0	Did not apply to me at all
1	Applied to me to some degree, or some of the time
2	Applied to me to a considerable degree, or a good part of time
3	Applied to me very much, or most of the time

Maximum score: 126

Minimum score: 25

Score interpretation

To interpret the level of stress among the elderly people. The score is classified into five categories like normal, mild, moderate, severe, and extremely severe.

Score interpretation

Level of stress	Range
Normal	0 - 30
Mild	31- 40
Moderate	41 - 59
Severe	60-79
Extremely severe	80 above

3.10.3 Content validity

Data collection tool was an instrument that measures the variables interest of the study accurately, precisely and sensitively.

Content validity of the tool was obtained from experts in the field of psychiatric nursing, psychiatry, psychology and statistician. The experts were an associate professor, psychiatrist and clinical psychologist. The experts were requested to check the relevance, sequence and adequacy of the content. There was uniform agreement of the tool which was adopted to conduct the study. Hence, the investigator precedes the same tool.

3.11 Ethics consideration

The study objectives, intervention, data collection procedure were approved by the research and Ethics Committee of Madras Medical College, Chennai-3. The respondents were explained about the purpose and need for the study. They were assured that their details and answers used only for the research purpose. Further they were ensured that their details would be kept confidentially. Thus the investigator followed the Ethics guidelines, which were issued by the Ethics Committee after getting a written permission.

3.12 Pilot study

The main objective of the pilot study was to help the researcher to become familiar with the use of tool and to find out the difficulties in the main study. The investigator underwent guided imagery technique training program and obtained a certificate. The pilot study was conducted after getting ethical clearance and the permission from the Vishranthi old age home from 22.06.15 to 27.06.15, Palavakkam, Chennai. It was conducted for a period of one week. Sample of 10 elderly people were selected by non-probability convenient sampling technique. Confidentiality was assured. Informed consent was obtained from them before collection of the data.

Data were collected from the elderly people by structured questionnaire before the implementation of guided imagery technique. After completion of guided imagery technique sessions, the elderly people were assessed their stress level by using same scale.

3.13 Reliability

After pilot study reliability of the tool was assessed by using split half method. DASS score reliability correlation coefficient value is 0.86. This correlation coefficient is very high and it was good tool to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home, at Chennai.

3.14 Data collection procedure

The study was conducted in Vishranthi home for aged and destitute women at Palavakkam, Chennai.

- ❖ A formal permission was obtained from the Director of Vishranthi old age home. The Investigator obtained data from the elderly people who were staying in the home.
- ❖ The main study was conducted for a period of 4 weeks from July 17th to Aug 14th 2015.

Initially the investigator approached each elderly after getting permission from the Director.

- ❖ The old age home consists of 175 elderly females. From the total, investigator selected 80 elderly females initially. In it 5 of them were dropped due to chronic illness, 10 of them were unable to attend, due to their physical inability and 5 were not willing to participate in the study.
- ❖ The investigator selected 60 elderly people as per the inclusion and exclusion criteria.
- ❖ The elderly people were introduced with the whole program after an introduction.
- ❖ Written informed consent was obtained from them for willingness to participate in the study.
- ❖ They were assured that their responses and details will be kept confidential and would be used only for the research purpose.
- ❖ Before the tool was administered some informal discussion were made with participants to establish rapport so that they would be relaxed.

The total 60 elderly people were divided into two groups. Each group contained 30 people. Every day the participants were gathered around 10AM in the common hall. The pre-test questionnaire was administered to them and they were asked to give appropriate answers for all statements to find out the stress level by structured scale before guided imagery technique. First the investigator demonstrated the guided imagery technique steps to first group for 15 to 30 minutes in the morning and evening session per day for the first 2 weeks. Then the same was continued for the same for the next 30 members. Likewise all the 60 samples were given guided imagery technique.

Using guided imagery to reduce stress

To start managing stress using guided imagery, take the following steps. Establish rapport with the client and know about the happiest moment which he/she wants to imagine and apply in a stressful situation. Tell them to remove tight ornaments and uncomfortable materials.

Step 1: Find a Quiet place

If possible find a quiet place, it could be a park bench, an empty room or even your office to sit down in a straight position.

Head and back should be kept in a straight position

Arms should be kept on the thighs

Knees and toes should be kept close.

Step 2: Muscle Relaxation

One: head is relaxing, eyelids became heavier, eyes relaxing, nose is relaxing, lips is relaxing, and chin is relaxing.

Two: neck is relaxing, neck muscles relaxing.

Three: shoulders are relaxing, right shoulder is relaxing, right hand fingers are relaxing, left shoulder is relaxing, left hand is relaxing, and left hand fingers are relaxing.

Four: chest is relaxing, take a deep breath, chest muscles are relaxing.

Five: abdomen is relaxing, abdomen muscles are relaxing.

Six: hip muscles are relaxing.

Seven: thigh muscles are relaxing, right thigh is relaxing, left thigh is relaxing.

Eight: knees are relaxing

Nine: lower legs are relaxing, right leg is relaxing, left leg is relaxing.

Ten: foot is relaxing, toes are relaxing.

Step 3: Guided imagination intervention

Once you feel relaxed, picture yourself in the happiest moment. This can be an imaginary place, memory of a place, the moment with the persons whom

you loved. The scene that you imagine is highly personal and should ideally be one that you feel emotionally drawn to.

However, if you have trouble thinking of an image, consider using the following;

- Relaxing on a sunny tropical beach, listening to the waves, and digging your toes into the sand.
- Curling up in an armchair in a remote cabin, surrounded by mountains and snow, and relaxing in front of a fire with a cup of hot tea.
- Going on a picnic with your family to your favorite secret spot.
- Sitting by a waterfall deep in the forest, feeling the gentle moisture against your face, and listening to the birds.

Your goal is to immerse yourself fully in the scene: This includes what you can see, taste, touch and smell, as well as how you feel. The more you can include in your imagery, the more effective this technique will be.

Beach visualization relaxation

Imagine you are walking toward the ocean... walking through a beautiful, tropical forest... You can hear the waves up ahead... you can smell the ocean spray... the air is moist and warm... feel a pleasant, cool breeze blowing through the trees...

You walk along a path... coming closer to the sea... as you come to the edge of the trees, you see the brilliant aqua color of the ocean ahead... You walk out of the forest and onto a long stretch of white sand... the sand is very soft powder... imagine taking off your chappels... and walking through the hot, white sand toward the water...

The beach is wide and long... Hear the waves crashing to the shore... Smell the clean salt water and beach... You gaze again toward the water... it is a bright blue green...

See the waves washing up onto the sand... and receding back toward the ocean... washing up... and flowing back down... enjoy the ever repeating rhythm of the waves...

Imagine yourself walking toward the water... over the fine, hot sand... you are feeling very hot... As you approach the water, you can feel the mist from the ocean on your skin.

You walk closer to the waves, and feel the sand becoming wet and firm... A wave washes over the sand toward you... and touches your toes before receding...

As you step forward, more waves wash over your feet... feel the cool water provide relief from the heat. Walk further into the clear, clean water... you can see the white sand under the water... the water is pleasant, relaxing temperature... providing relief from the hot sun... cool but not cold.

You walk further into the water if you wish... enjoy the ocean for a few minutes... allow the visualization relaxation to deepen... more and more relaxed... enjoy the ocean...

Now you are feeling calm and refreshed... You walk back out of the water and onto the beach... Stroll along the beach at the water's edge... free of worries... not stress... calm... enjoying this day... Up ahead is a comfortable lounge chair and towel, just for you...

Sit or lie down in the chair, or spread the towel on the sand... relax on the chair or towel... enjoying the sun... the breeze... the waves... You feel peaceful and relaxed... allow all your stresses to melt away...

Step 4: Relax

Stay in your relaxed scene for as long as you feel comfortable, or as long as you feel comfortable, or as long as your schedule allows. Continue breathing deeply, and try not to let any outside thoughts intrude. Imagine the situation

which you want to change or the behavior which you want to modify or the situation which you want to forget.

When you are ready to leave, sit quietly and let your mind turn back to the situation at hand by following the steps again.

One: Foot is returning back to normal stage, toes are returning back to normal stage.

Two: Lower legs are returning back to normal, right leg is returning back to normal, and left leg is returning back to normal stage.

Three: Knees are returning back to normal.

Four: Thigh muscles are returning back to normal, right thigh is returning back to normal, left thigh is returning back to normal stage.

Five: Abdomen is returning back, abdomen muscles are returning back to normal stage.

Six: Hip muscles are returning back to normal position.

Seven: Chest is returning back to normal stage, chest muscles are returning to normal stage.

Eight: Shoulders are returning back, right shoulder is returning back, right hand fingers are returning back, left hand is returning back, left hand fingers are returning back to normal position.

Nine: Neck is return back to normal stage, neck muscles are returning back to normal stage.

Ten: Head is return back to normal stage, chin, mouth, nose relaxed. Slowly open your eyelids.

Keep in mind that imagery is most effective when you use all your senses. The more details that you can include in your imagined scene, the easier it will be to relax.

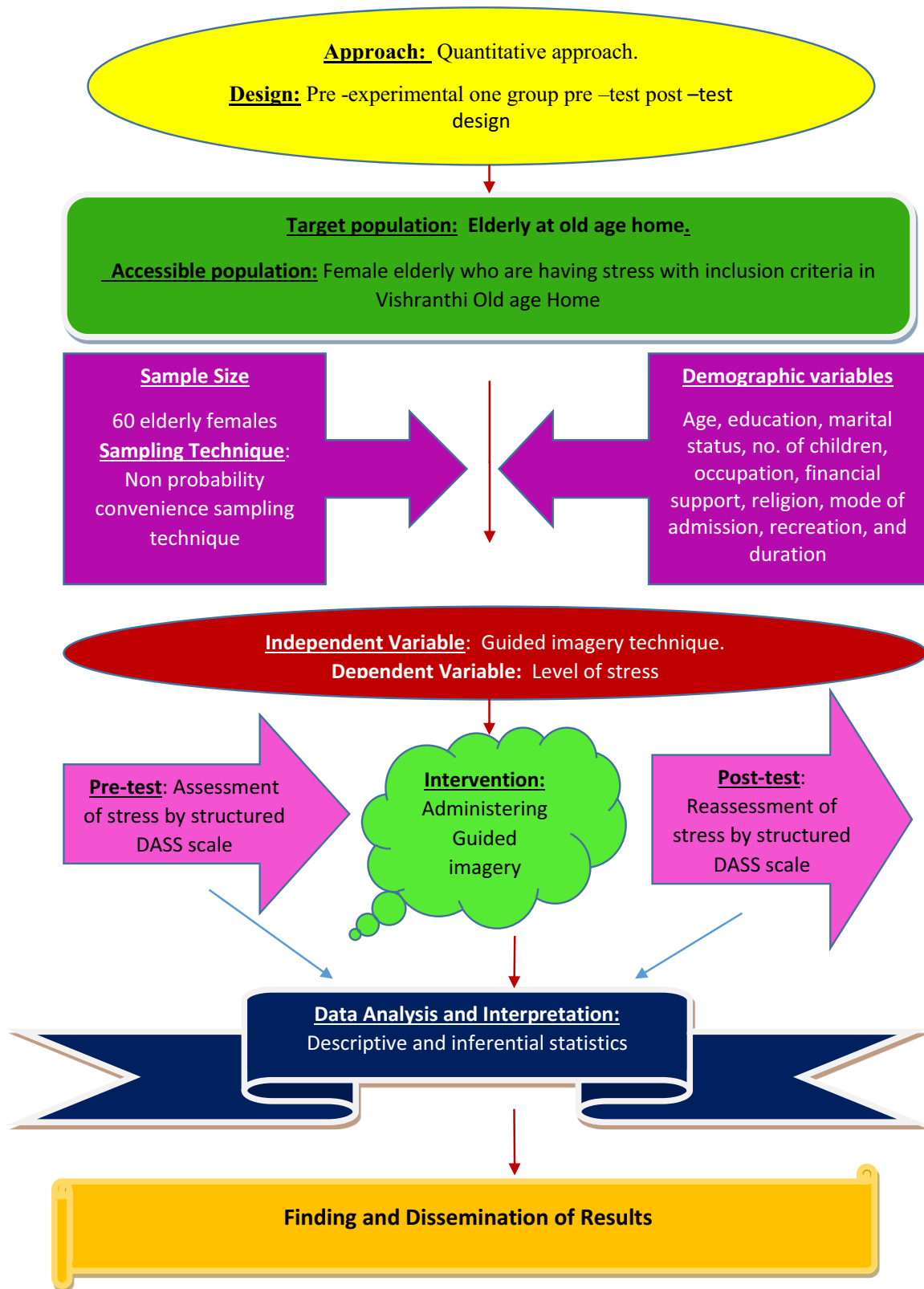
Then the post-test was done by using the same scale in the 3rd week. By the same time the guided imagery technique was practiced with the second group in the 2nd and 3rd week and post-test was done on the 4th week. At the end of the session doubt were clarified for both groups. During the guided imagery intervention the participant involvement was good.

At the end of the data collection, elderly people shared their experience about the study which helped to reduce the stress and they were requested to practice similar program in their future.

3.15 Data coding and entry and data analysis

- Demographic variables in categories were given in frequencies with their percentages.
- Stress score was given in mean and standard deviation.
- Quantitative stress score in pre-test and post-test was compared using student's paired 't' test.
- Association between demographic variables and stress score was analyzed using Chi-square test.

FIG. 3.1 SCHEMATIC REPRESENTATION OF RESEARCH STUDY



CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

Analysis is defined as categorizing ,ordering, manipulating, and summarizing of data to reduce to intelligible and interpretable form, so that research problem can be studied and tested with relationship between the variables.

This chapter dealt with the analysis and interpretation of the data obtained from 60 female elderly people who were staying in Vishranthi home for aged and destitute women, Palavakkam. The collected data were tabulated and presented according to the objectives under the following headings.

Section – I Socio demographic variables of the elderly people.

Section - II Stress level of elderly people before guided imagery technique.

Section – III Stress level of elderly people after guided imagery technique.

Section – IV Effectiveness of the guided imagery technique.

Section – V Associate the effectiveness of guided imagery technique with selected demographic variables

Section I**Table – 4.1: Distribution of socio demographic variables of the elderly people.**

S. No	Demographic variables		Frequency	In %
1	Age	60- 65 years	31	51.7
		66 - 70 years	29	48.3
2	Education	Primary	42	70.0
		Higher secondary	12	20.0
		Graduate	6	10.0
3	Marital Status	Married	11	18.3
		Single	9	15.0
		Divorced / separated	7	11.7
		Widowed	33	55.0
4	No. of Children	1 (or) 2	23	38.3
		More than 2	19	31.7
		No children	18	30.0
5	Occupation	Government	1	1.7
		Business	9	15.0
		Private	16	26.6
		Others	34	56.7
6	Financial Support	Old age pension	15	25.0
		Any other support	45	75.0
7	Mode Of Admission	Referred by trust	22	36.7
		By the son / daughter	6	10.0
		Others	32	53.3
8	Recreational activities	Watching TV	5	8.3
		Reading books	27	45.0
		Talking with others	9	15.0
		Others	19	31.7
9	Duration of Stay	Below one year	24	40.0
		2-3 years	11	18.3
		3-5 years	11	18.3
		> 5 years	14	23.4
10	Religion	Hindu	45	75.0
		Christian	8	13.3
		Muslim	7	11.7

Table 4.1: Shows the demographic information of elderly females who participated in the study.

- **Age:** In view of age 31(51.7%) were in the age group of 60 - 65 years. 29 (49.3%) were in the age group of 65 – 70 years.
- **Education:** Out of 60 Samples, most of them 42 (70.0%) had primary education.12 (20.0%) had higher secondary education and 6 (10.0%) had graduation
- **Marital Status:** Among 60 samples 33 (55.0%) were widowed, 11 (18.3%) were married, 9 (15.0%) were single and 7 (11.7%) were divorced and separated.
- **Number of children in the family:** Among 60 samples, 23 (38.3%) had 1 or 2 children, 19 (31.7%) had more than 2 children and 18 (30.0%) had no children.
- **Occupation :** With regard to occupation, 1 (1.7%) was Government employee, 9 (15.0%) were Business holders, 16 (26.6%) were Private employees and 34 (56.7%) were other Employees.
- **Financial support:** Out of 60 samples 15 (25.0%) were old age pensioner and 45 (75.0%) had no other support from the old age home.
- **Mode of Admission:** Among the 60 samples, 32 (53.3%) had got admitted by the others, 22 (36.7%) were admitted by the trust and 6 (10.0%) were admitted by their Children.
- **Recreation activities:** Among 60 samples, 27 (45.0%) had recreation activity of reading books, 19 (31.7%) were of other activities, 9 (15.0%) had recreation activity like talking with others and 5 (8.3%) were watching Television.
- **Duration of stay:** In view of duration of stay 24 (40.0%) were below one year, 14 (23.4%) were stayed for more than 5 years, 11 (18.3%) were staying for 2-3 years and 11(18.3%) were staying 3-5 years in the old age home.
- **Religion:** Among 60 samples 45 (75.0%) were Hindu of religion, 8 (13.3%) were Christians and 7 (11.7%) belonged to Muslim religion.

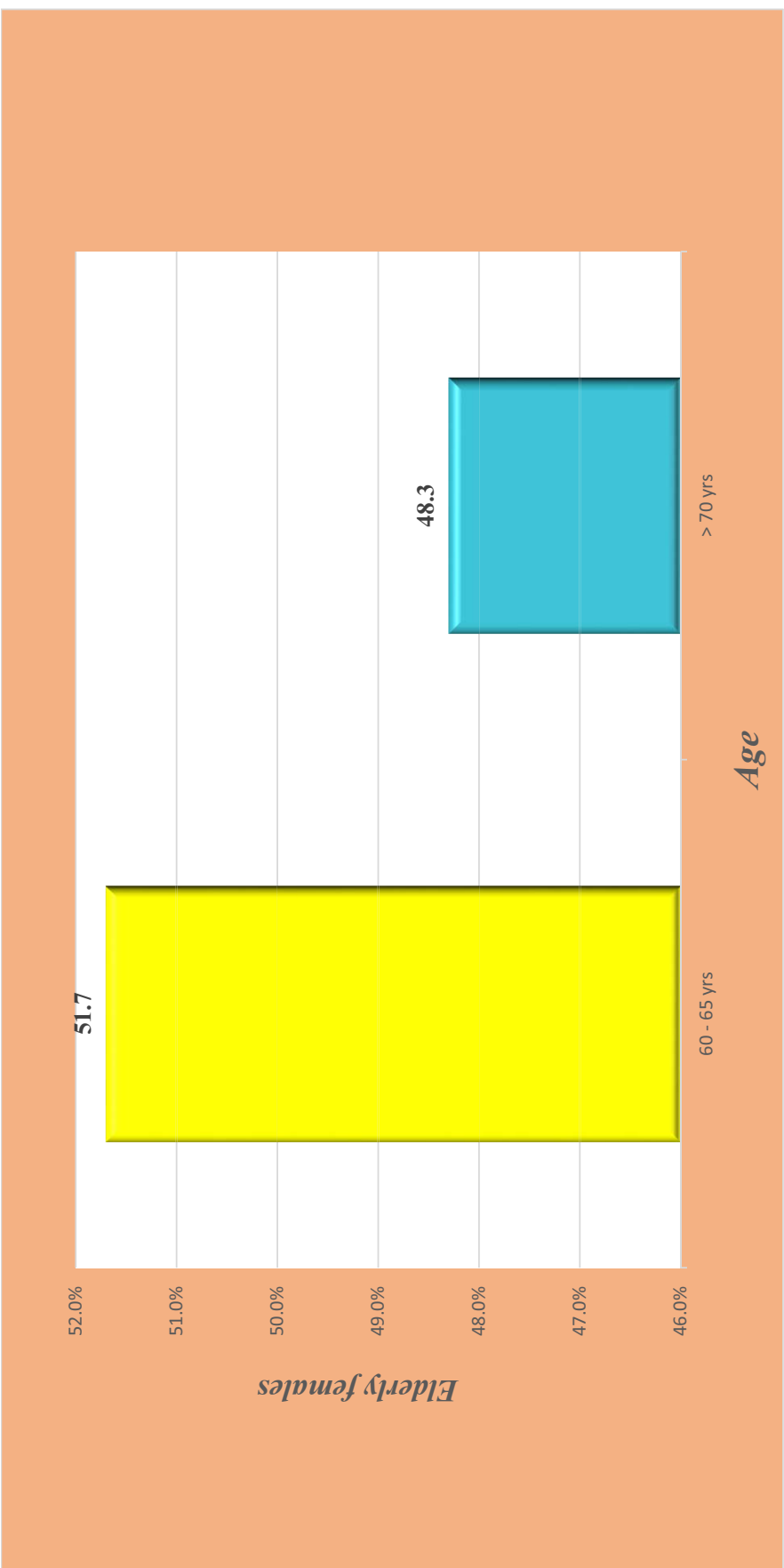


Fig 4.1 Age wise distribution of elderly females

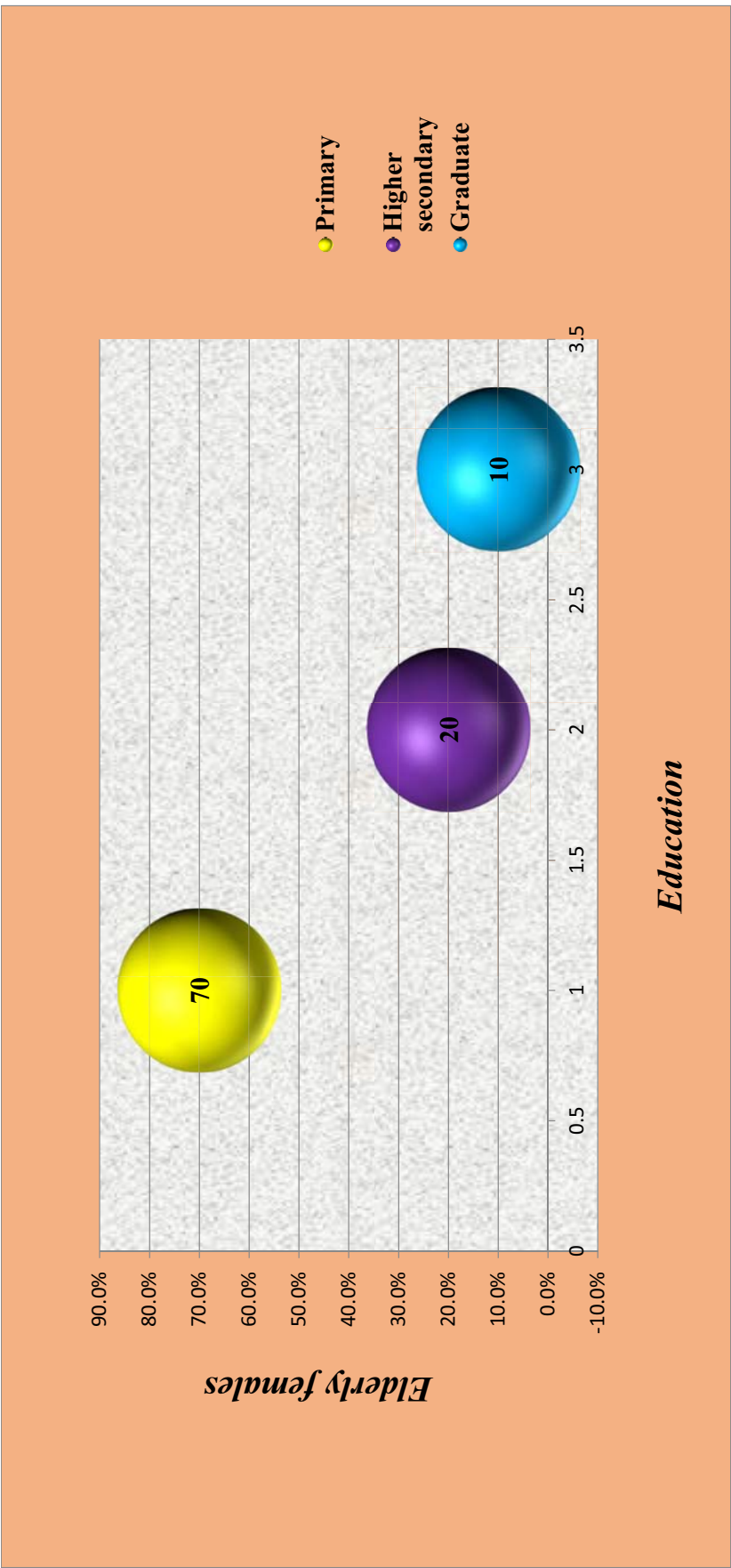


Fig 4.2 Education wise distribution of the elderly females

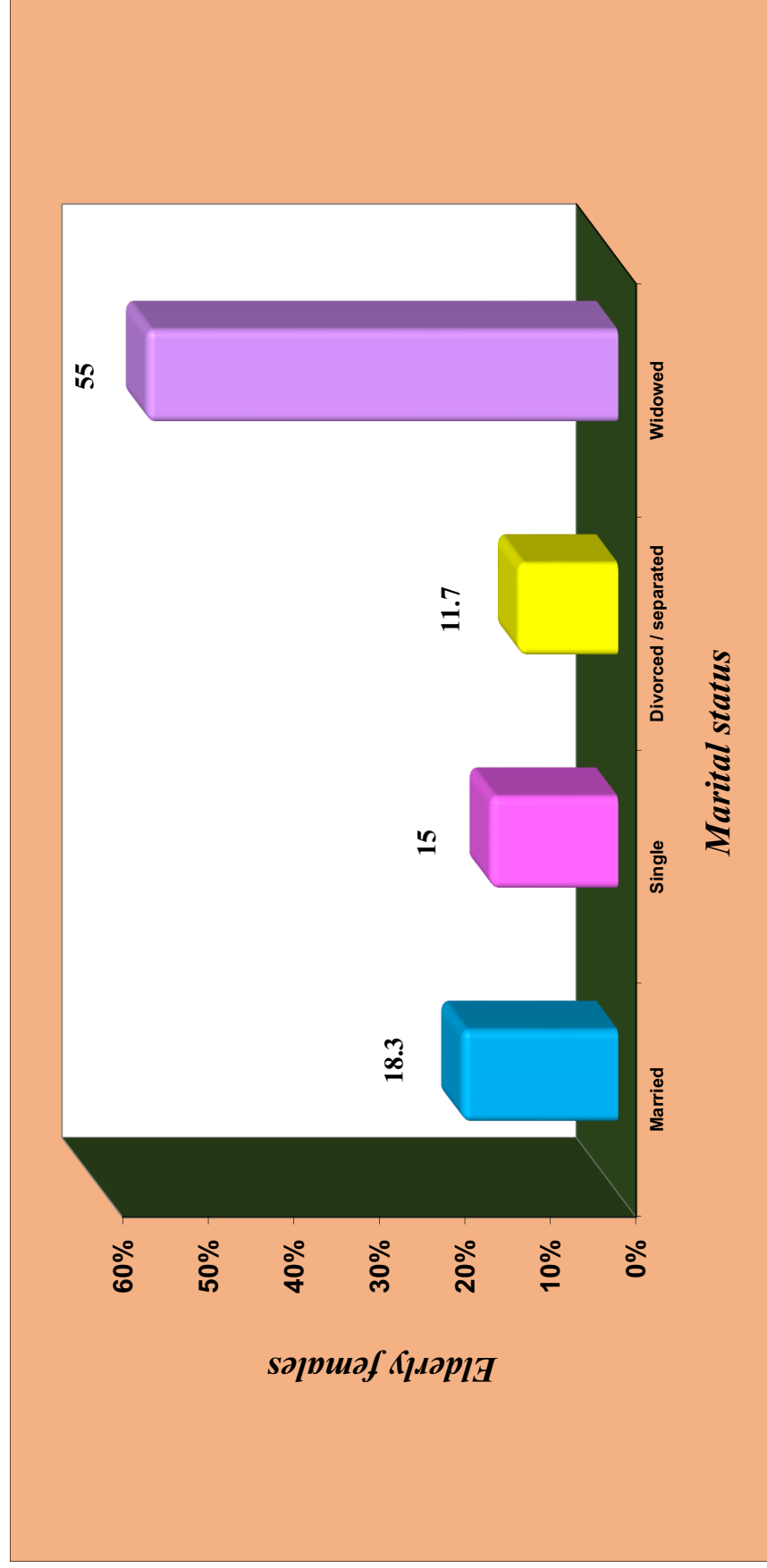


Fig 4.3 Marital status wise distribution of the elderly females

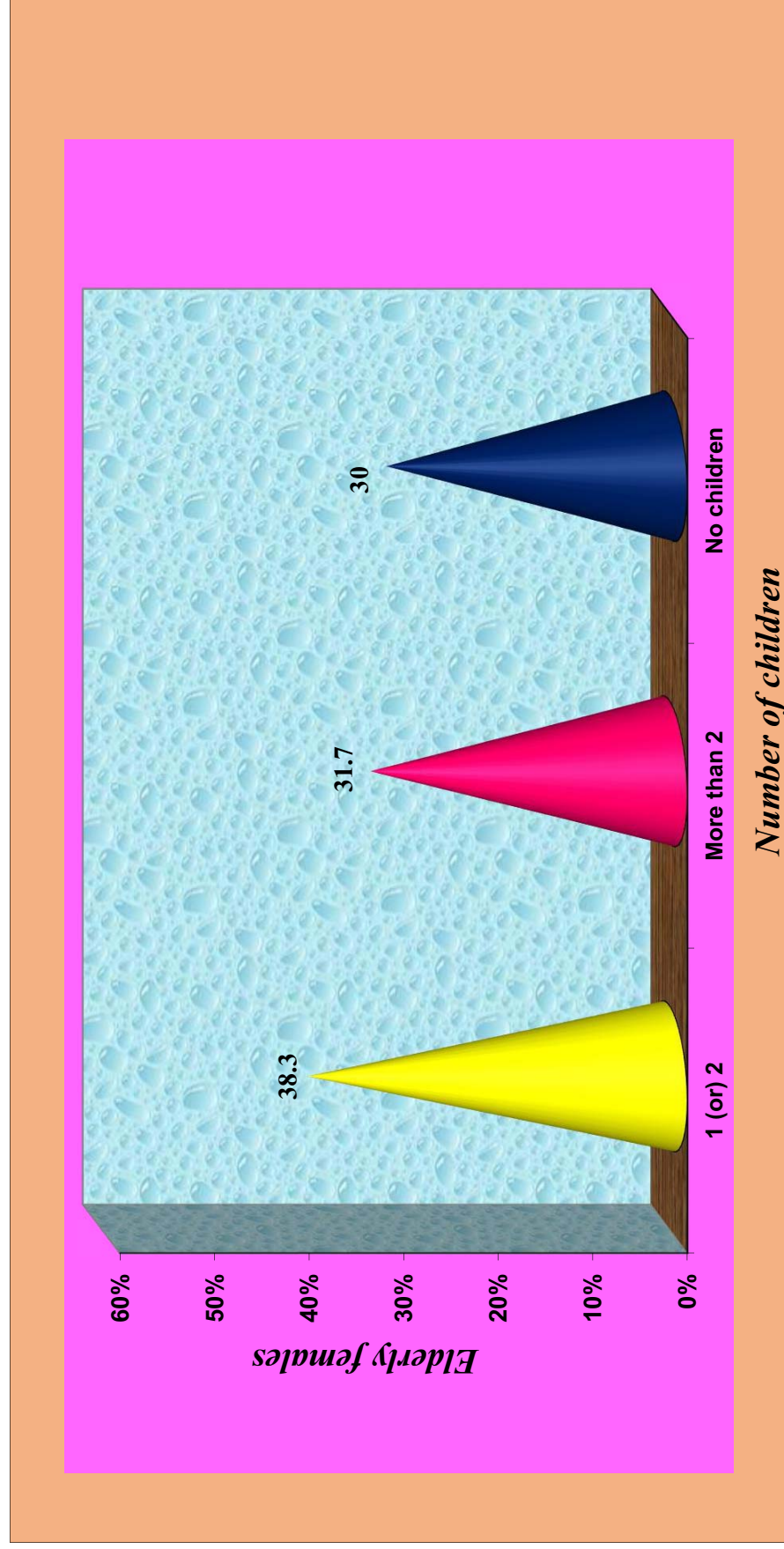


Fig 4.4 Number of children wise distribution of elderly people

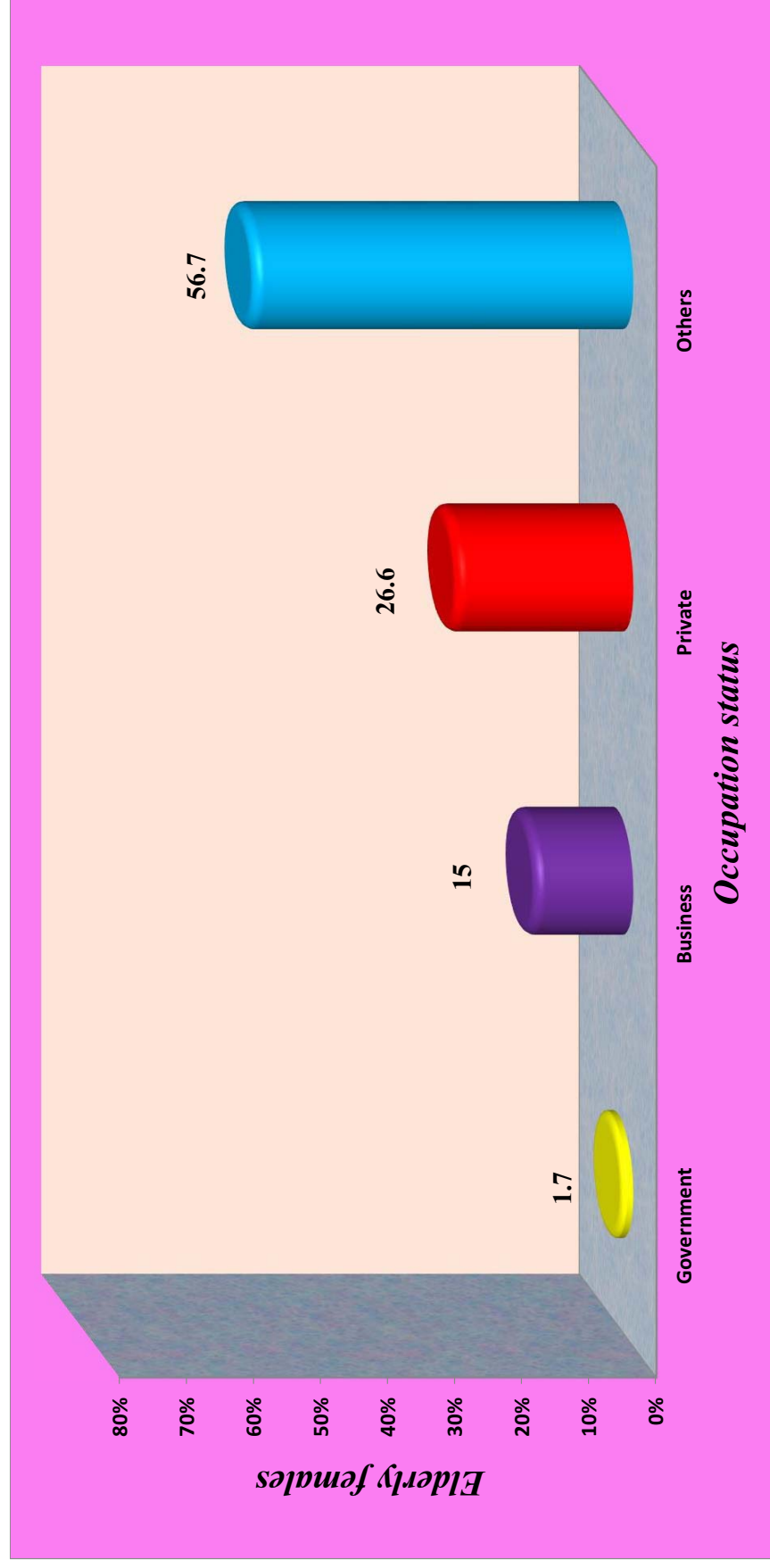
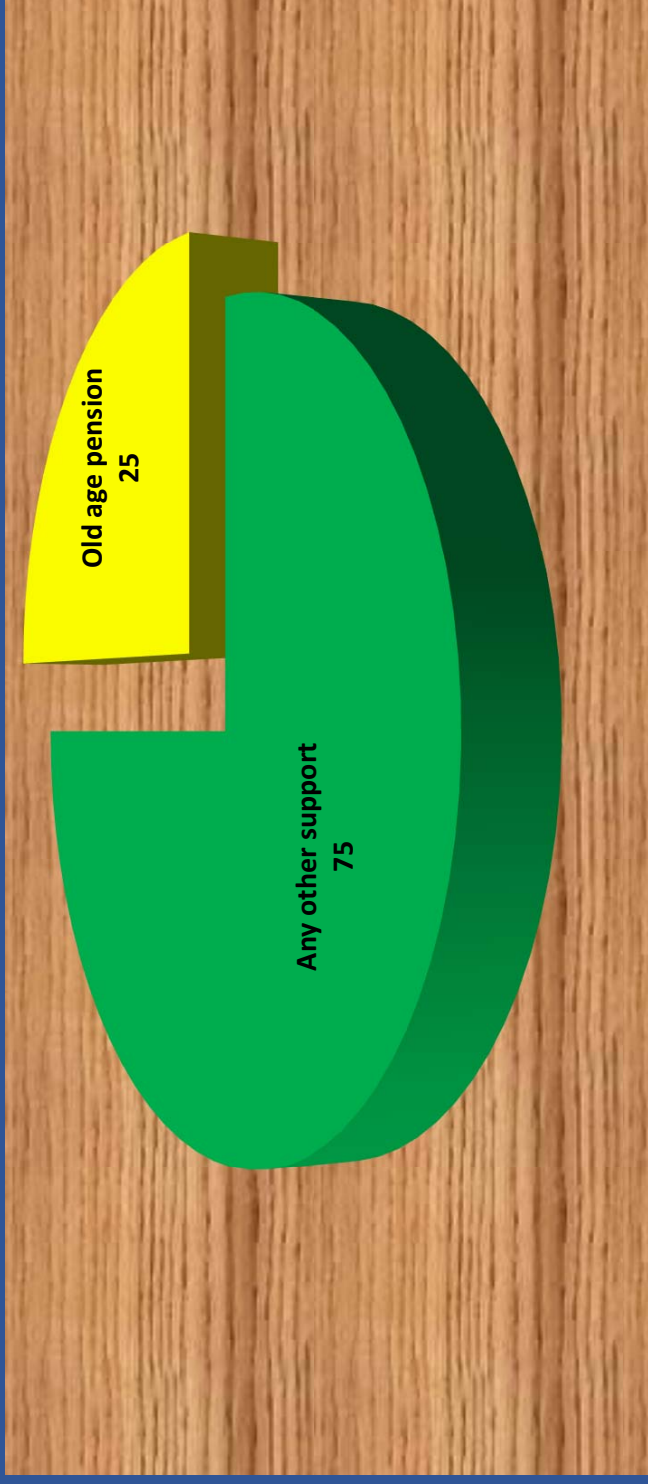


Fig 4.5 Occupation status wise distribution of elderly people



4.6 Financial support wise distribution of elderly people

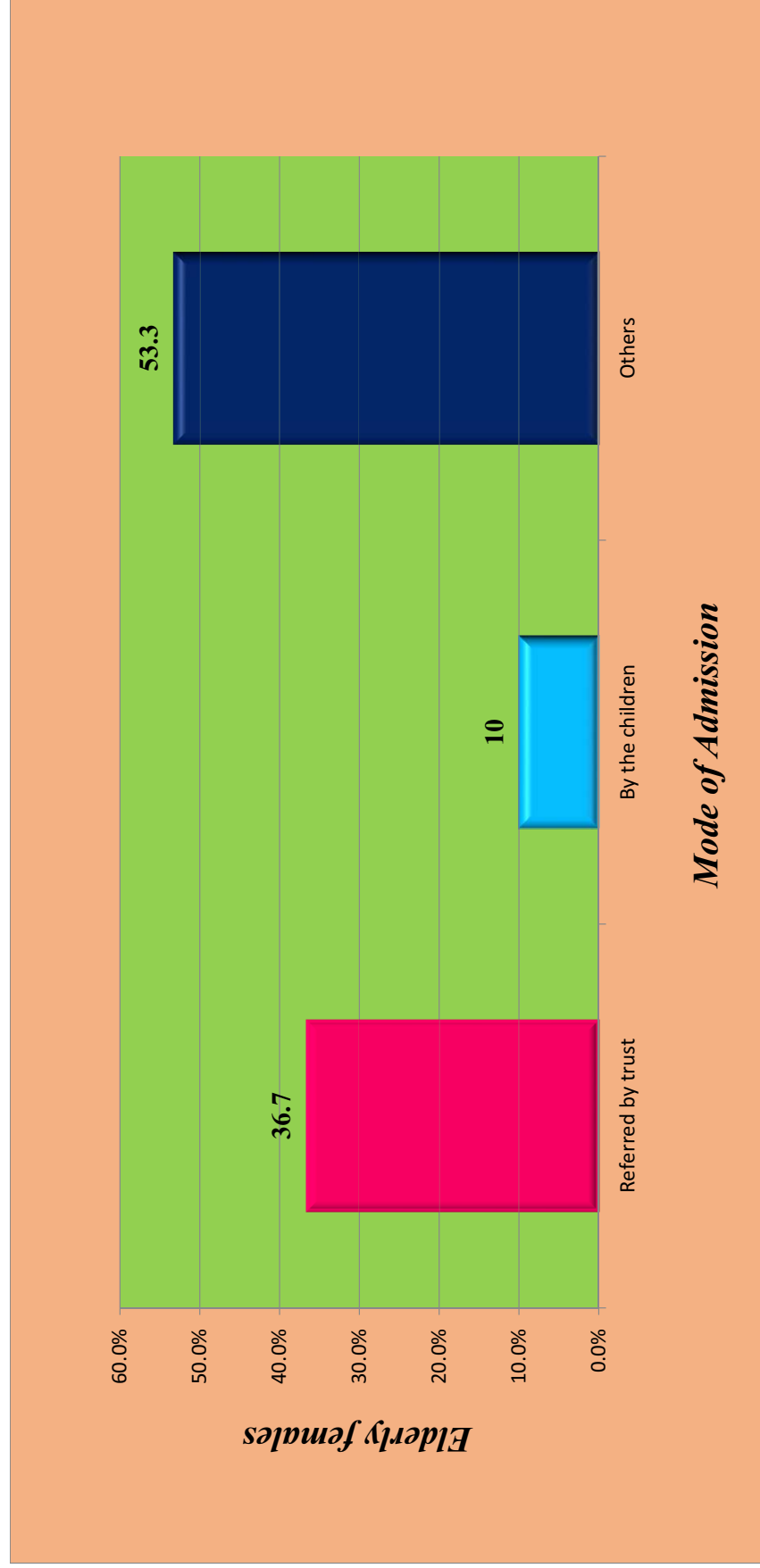


Fig 4.7 Mode of admission wise distribution of elderly people

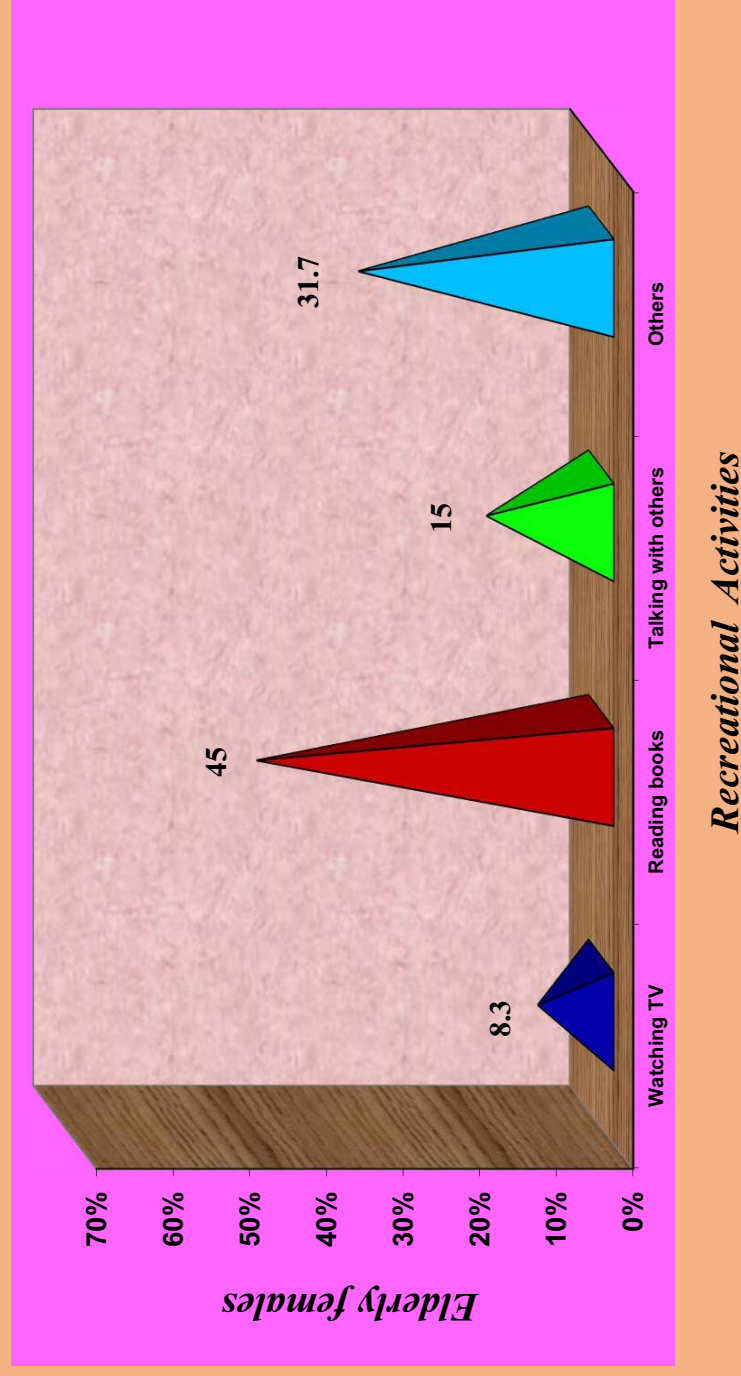


Fig 4.8 Recreational activities wise distribution of elderly females

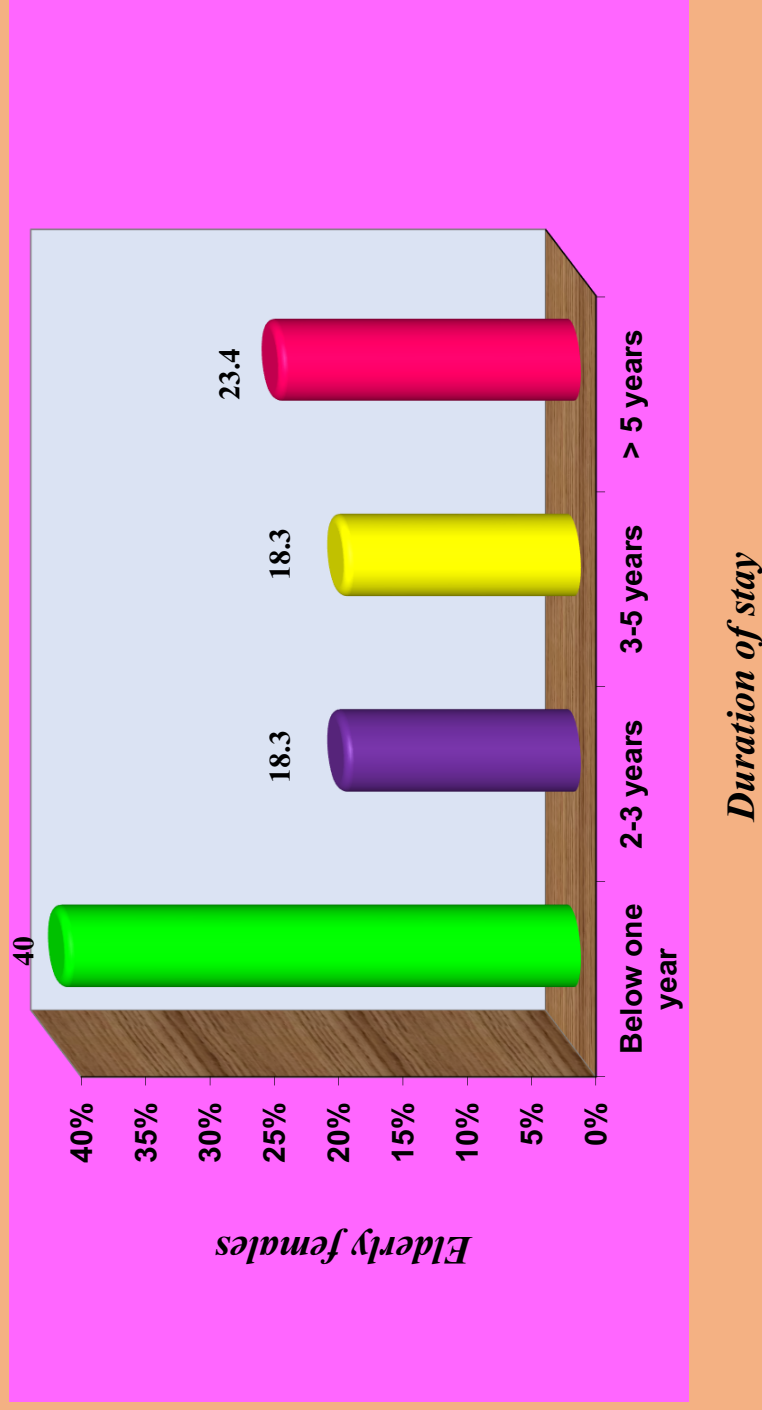
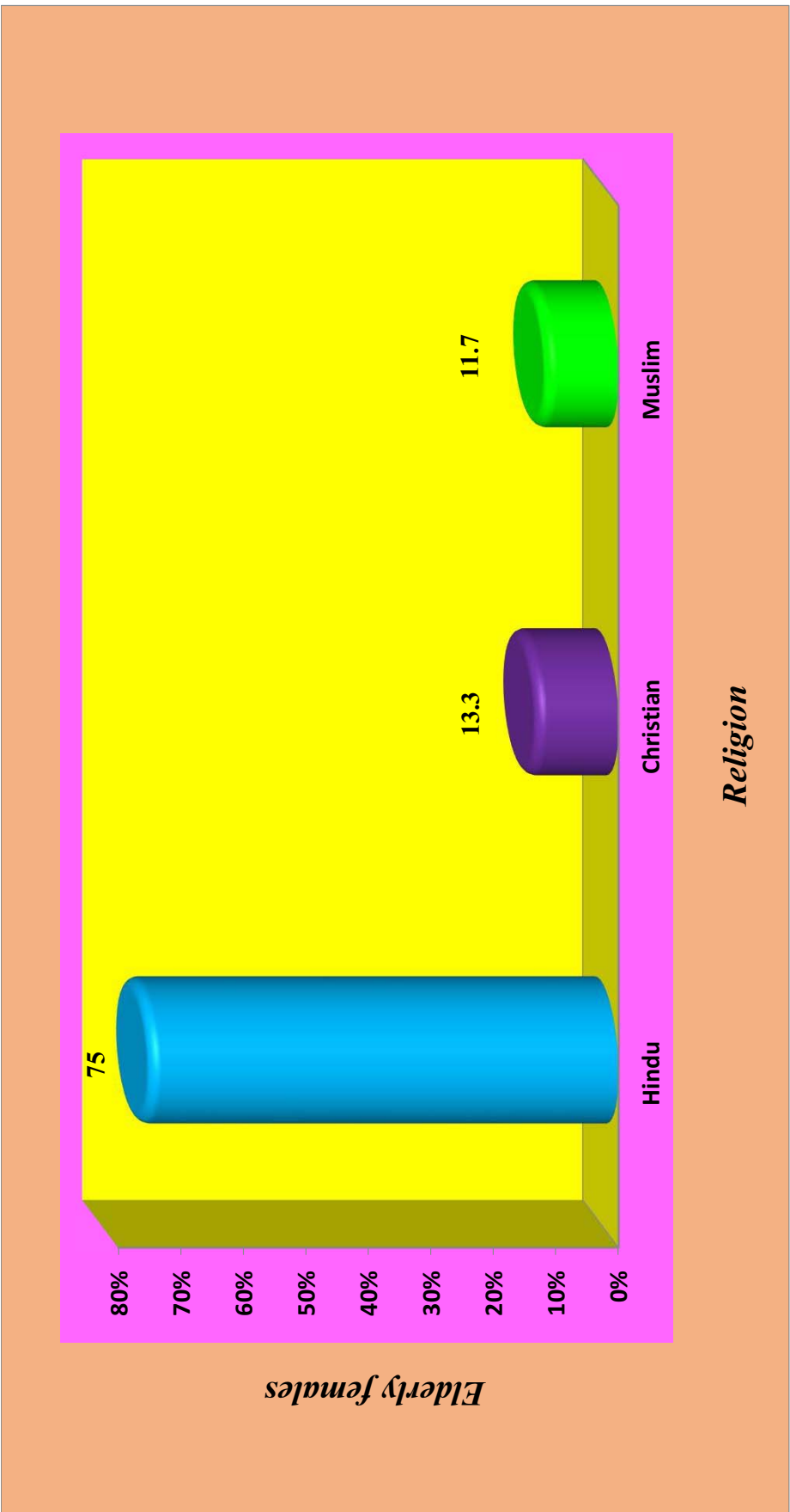


Fig 4.9 Duration of stay wise distribution of elderly people



4.10 Religion wise distribution of elderly females

Section - II

Table 4.2 Distribution of pretest percentage of stress score domain wise

DASS score on	No. of questions	Min –Max score	Mean	SD	Mean score in %
Depression	14	0 - 42	25.90	5.88	61.7
Anxiety	14	0 - 42	26.61	6.16	63.4
Stress	14	0 - 42	27.75	6.21	66.1
OVERALL	42	0 - 126	80.26	15.71	63.7

Table 4.2 shows each aspect wise pretest stress scores among elderly people at selected old age home. They were having more score in stress (66.1%) and less score in depression (61.7%). Overall they were having 63.7% of DASS score.

Table 4.3 Distribution of pretest level of stress of elderly people

DASS score on	Normal		Mild		Moderate		Severe		Extremely severe	
	n	%	n	In %	n	In %	n	In %	n	In %
Depression	0	0.0	0	0.0	10	16.6	22	36.7	28	46.7
Anxiety	0	0.0	0	0.0	6	20.0	20	33.3	34	56.7
Stress	0	0.0	0	0.0	5	8.3	18	30.0	37	61.7

Table 4.3 shows each domain wise level of pretest stress score among elderly people at selected old age home

Table 4.4 Distribution of pretest level of DASS score

Level of DASS	No. of elders	In %
Normal	0	0.0
Mild	0	0.0
Moderate	7	11.7
Severe	20	33.3
Extremely severe	33	55.0
Total	60	100

Table 4.4 shows level of stress before administration of guided imagery technique. 11.7% of the elders were having moderate level of stress, 33.3% of them were having moderate stress and 55.0% of them were having extremely severe stress.

Score interpretation

Minimum score = 0 Maximum score =30 questions= 42 Total score=126

S no.	Grade	Score
1.	Normal	0 - 30
2.	Mild	31 - 40
3.	Moderate	41 - 59
4	Severe	60 - 79
5	Extremely severe	>79

	Depression	Anxiety	Stress
Normal	0 – 9	0 - 7	0 – 14
Mild	10 – 13	8 – 9	15 – 18
Moderate	14 – 20	10 – 14	19 – 25
Severe	21 – 27	15 – 19	26 – 33
Extremely Severe	28+	20+	34 +

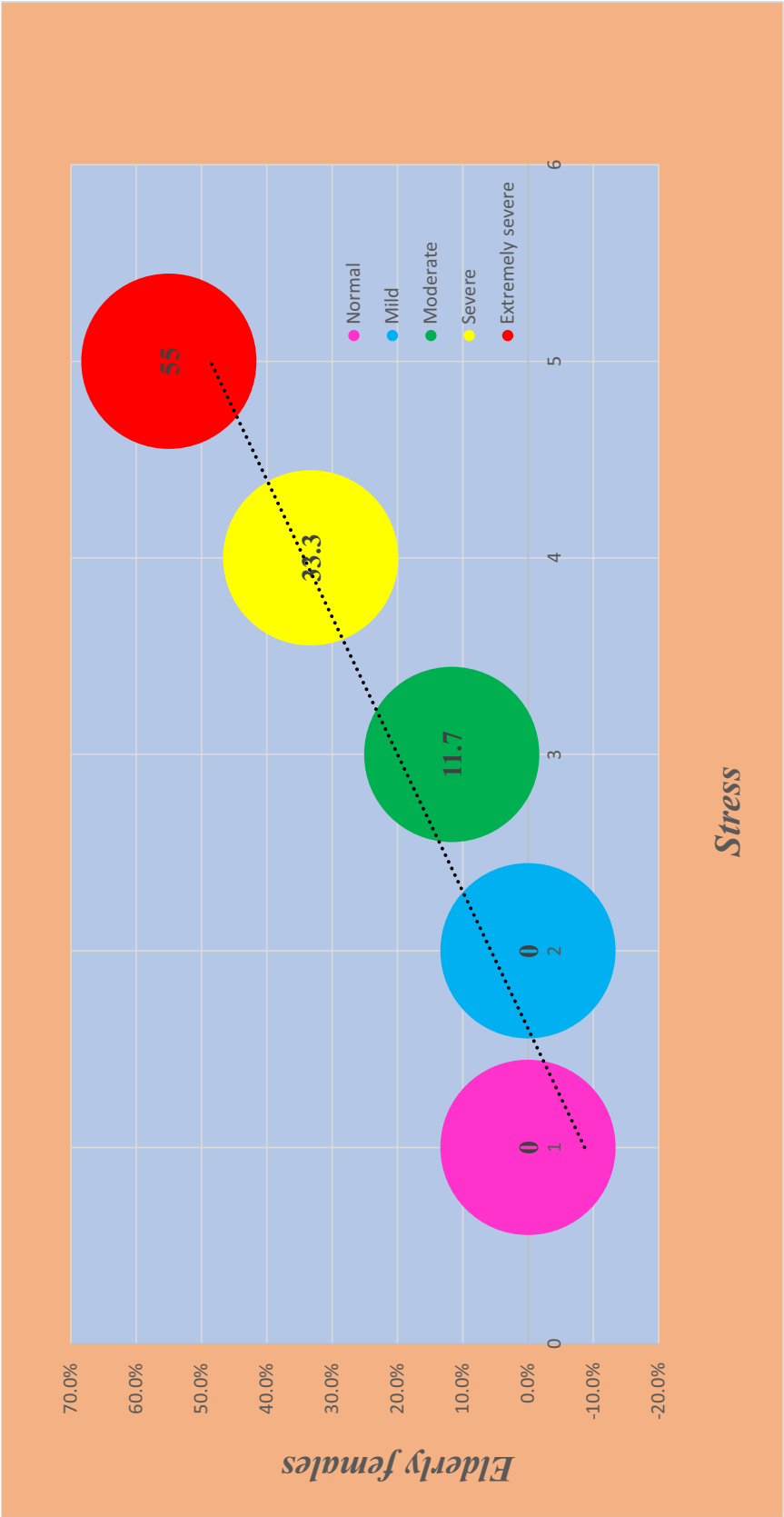


Fig 4.11 Distribution of pre-test level of stress of elderly people

Table 4.5 Distribution of domain wise percentage of posttest score

DASS score on	No. of questions	Min –Max score	Mean	SD	Mean score in %
Depression	14	0 - 42	12.61	2.92	30.0
Anxiety	14	0 - 42	13.30	2.81	31.7
Stress	14	0 - 42	14.03	2.47	33.4
OVERALL	42	0 - 126	39.94	5.61	31.7

Table 4.5 Shows each aspects wise posttest stress scores among elderly people at selected old age home. They were having more score in stress (33.4%) and less score in depression (30.0%). Overall they were having 31.7% of DASS score.

Table 4.6 Posttest domain wise percentage of DASS score

DASS score on	Normal		Mild		Moderate		Severe		Extremely severe	
	n	In %	n	In %	n	In %	n	In %	n	In %
Depression	41	68.3	12	20.0	7	11.7	0	0.0	0	0.0
Anxiety	36	60.0	14	23.3	10	16.7	0	0.0	0	0.0
Stress	34	56.7	13	21.7	13	21.7	0	0.0	0	0.0

Table 4.6 Shows domain wise level of posttest stress score among elderly people at selected old age home.

Table 4.7 Posttest level of DASS score

Level of DASS	Frequency	In %
Normal	37	61.7
Mild	13	21.7
Moderate	10	16.6
Severe	0	0.0
Extremely severe	0	0.0
Total	60	100

Table 4.7 Shows level of stress after administration of guided imagery technique. 61.7% of the elders were having normal level of stress, 21.7% of them were having mild stress and 16.6% of them were having moderate stress.

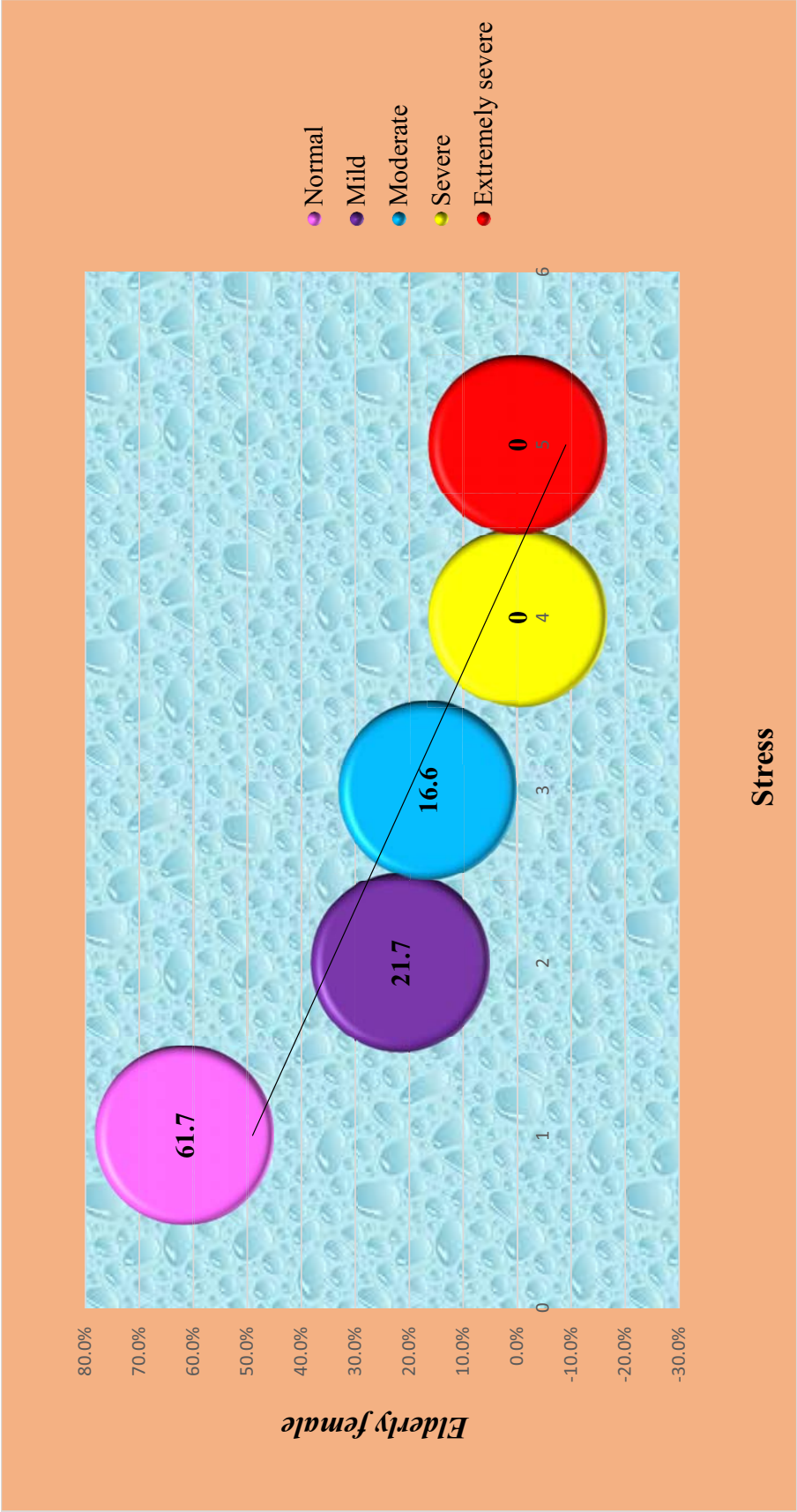


Fig 4.12 Distribution of posttest level of stress of elderly people

Table 4.8 Distribution of comparison of mean stress score

	Stress score				Difference	Student's paired t-test
	Pretest		Posttest			
	Mean	SD	Mean	SD		
Depression	25.90	5.88	12.61	2.92	13.29	t=16.46, P=0.001***
Anxiety	26.61	6.16	13.30	2.81	13.31	t=15.64, P=0.001***
Stress	27.75	6.21	14.03	2.47	13.72	t=15.55, P=0.001***

** Significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$*

Considering **Depression** aspects, in pretest, elders were having 25.90 score where as in posttest they are having 12.61 score, so the difference is 13.29. This difference between pretest and posttest was large and it was statistically significant.

Considering **Anxiety** aspects, in pretest, elders were having 26.61 score where as in posttest they were having 13.30 score, so the difference was 13.31. This difference between pretest and posttest was large and it was statistically significant.

Considering **Stress** aspects, in pretest, elders were having 27.75 score where as in posttest were having 14.03 score, so the difference was 13.72. This difference between pretest and posttest was large and it was statistically significant. Statistical significance was calculated by using student's paired 't' test.

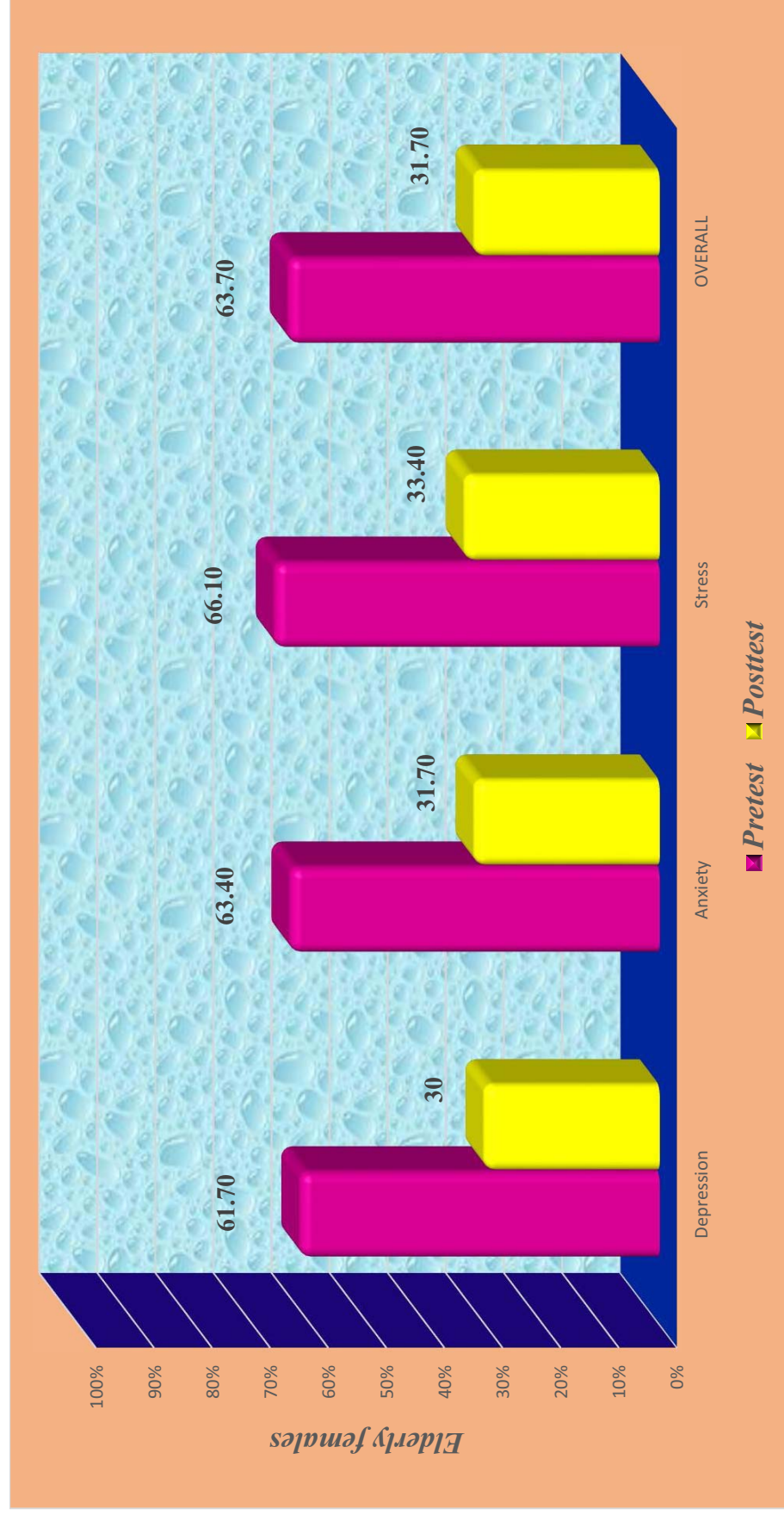


Fig 4.13 Domain wise pretest and posttest percentage of stress score

Table 4.9 Comparison of overall DASS score

	Frequency	Mean \pm SD	Difference	Student's paired t-test
Pre-test	60	80.26 \pm 15.71	40.32	t=17.98 P=0.001***
post-test	60	39.94 \pm 5.61		

* Significant at $P \leq 0.05$ ** Highly significant at $P \leq 0.01$ *** Veryhigh significant at $P \leq 0.001$

Considering **overall**, in pretest, elders were having 80.26 score where as in posttest they were having 39.94 score, so the difference is 40.32.

The difference between pretest and posttest stress score was large and it was statistically significant Differences between pretest and posttest stress was analyzed using paired t-test.

Fig 4.14 Comparison of pretest and posttest stress score among elderly people at selected old age home

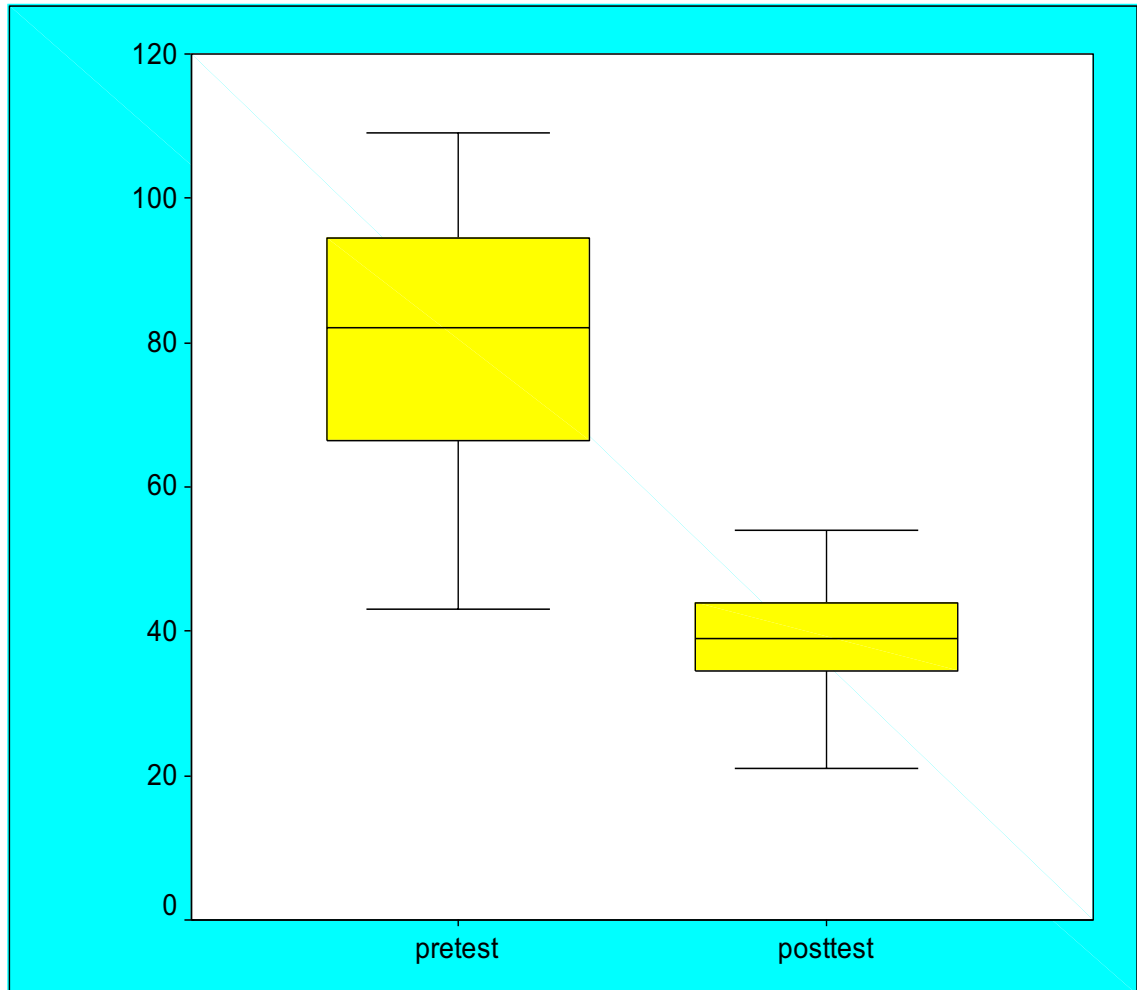


Table 4.10 Comparison of pretest and posttest level of stress

	Pre-test		Post-test		Chi-square test
	Frequency	In %	Frequency	In %	
Normal	0	0.0	37	61.7	$\chi^2=103.52$ $P=0.001^{***}$
Mild	0	0.0	13	21.7	
Moderate	7	11.7	10	16.6	
Severe	20	33.3	0	0.0	
Extremely severe	33	55.0	0	0.0	
Total	60	100	60	100	

* Significant at $P \leq 0.05$ ** Highly significant at $P \leq 0.01$ *** Very high significant at $P \leq 0.001$

Before administration of guided imagery technique, 11.7% of the elders were having moderate level of stress, 33.3% of them were having moderate stress and 55.0% of them were having extremely severe stress.

After administration of guided imagery technique 61.7% of the elders were having normal level of stress ,21.7% of them were having mild stress and 16.6% of them were having moderate stress. Chi-square test was used to test statistical significance.

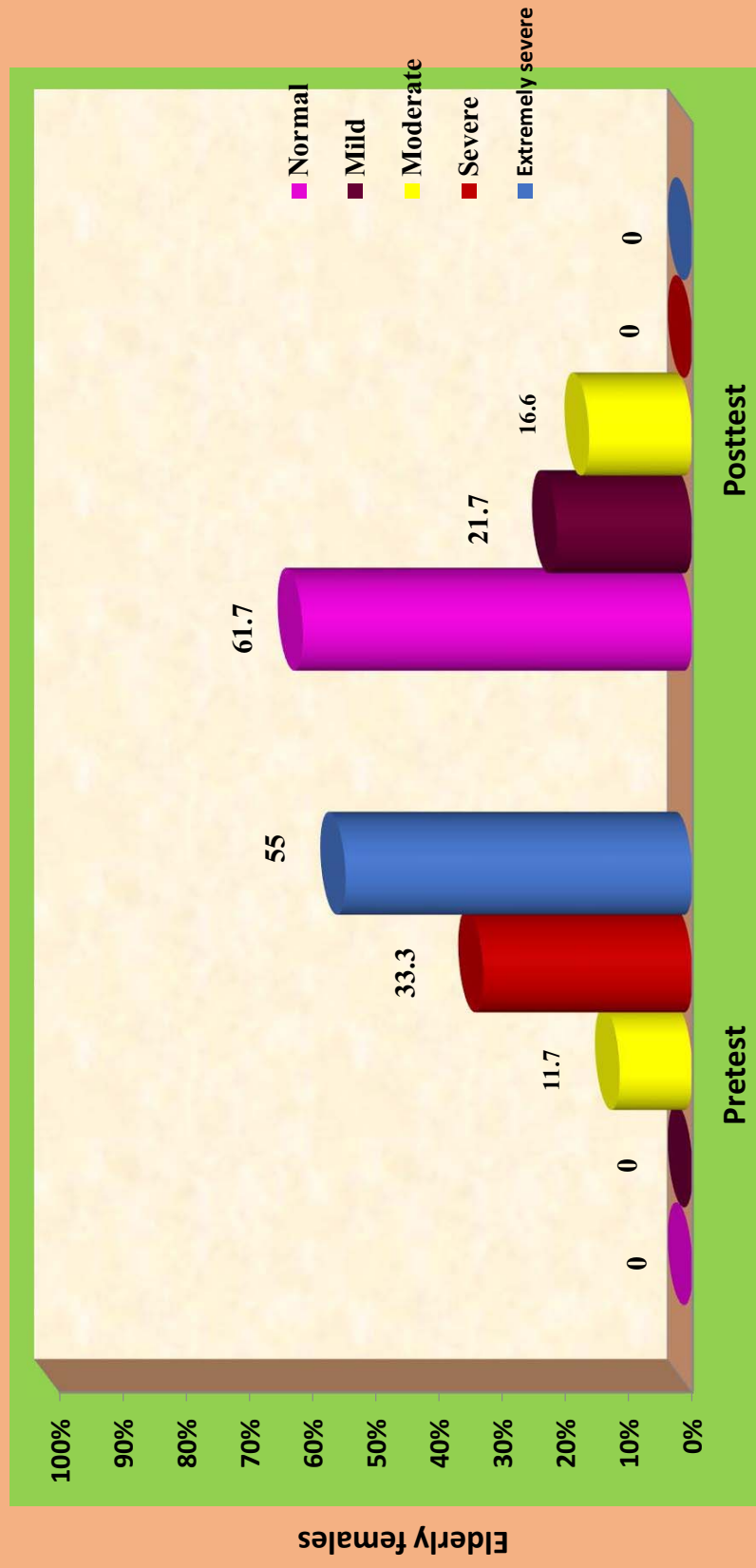


Fig 4.15 Distribution of pretest and posttest level of stress score among elderly females

Table 4.11 Distribution of percentage of stress reduce after guided imagery technique

Domains	Pretest In %	Posttest In %	Reduction of stress score in %
Depression	61.7	30.0	31.7
Anxiety	63.4	31.7	31.7
Stress	66.1	33.4	32.7
OVERALL	63.7	31.7	32.0

- ❖ In Depression aspect they were reduced 31.7% of score
- ❖ In Anxiety aspect they were reduced 31.7% of score
- ❖ In Stress aspect they were reduced 32.7% of score
- ❖ Overall they got their stress reduced about 32% score when comparing pretest and posttest score.
- ❖ This shows the effectiveness of guided imagery technique

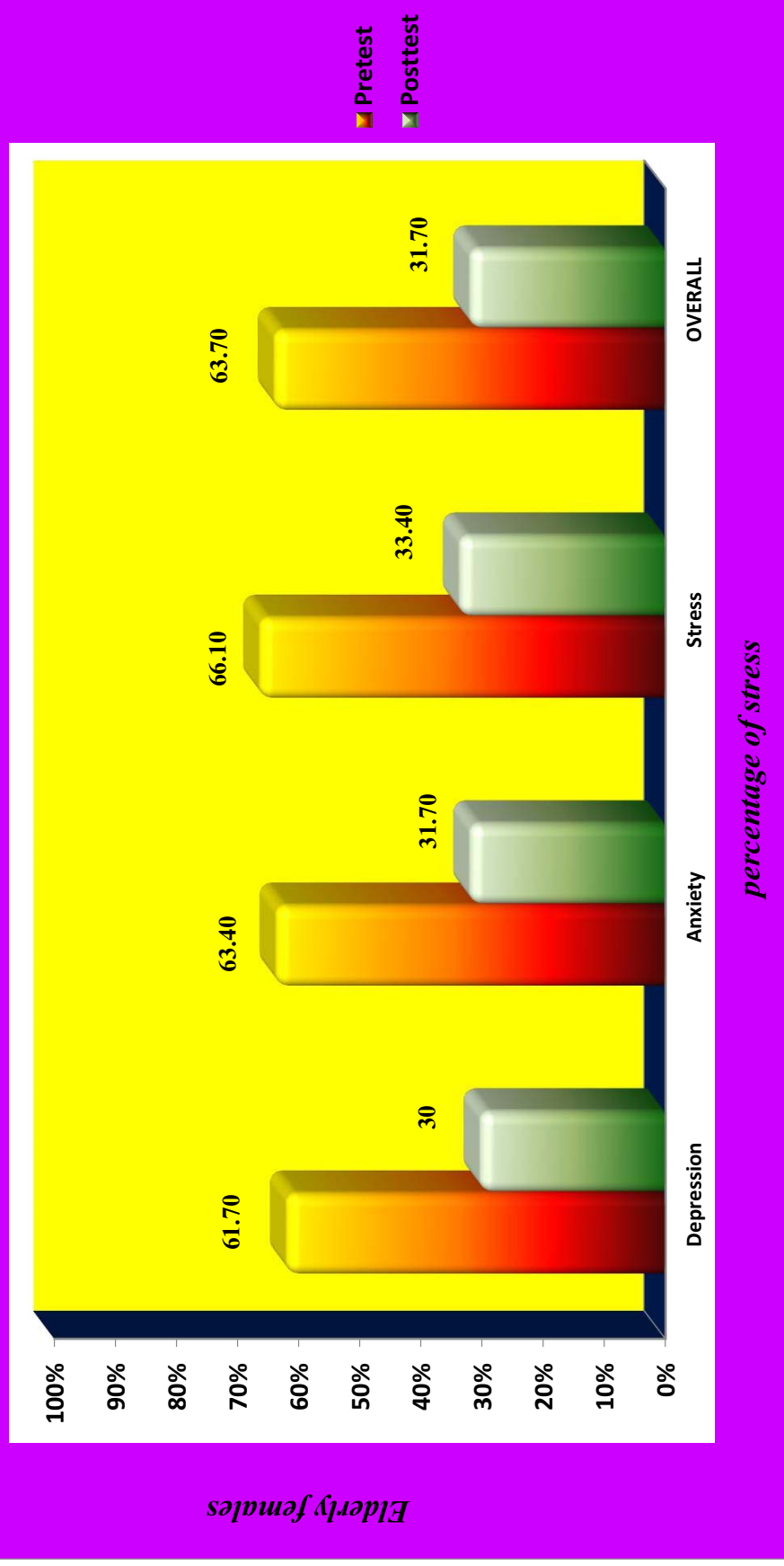


Fig 4.16 Percentage of stress reduce after guided imagery technique

Table 4.11 Comparison of overall stress score

	<i>Max score</i>	<i>Mean stress score</i>	Mean Difference in stress with 95% Confidence interval	Percentage of stress reduction with 95% Confidence interval
Pretest	126	80.26	40.32(36.05 – 44.58)	32.0 %(28.6% – 35.4%)
Posttest	126	39.94		

On an average, in posttest, elders got 32.0% of stress score reduced after having guided imagery technique. Differences between pretest and posttest score was analyzed using percentage with 95% CI and mean difference with 95% CI.

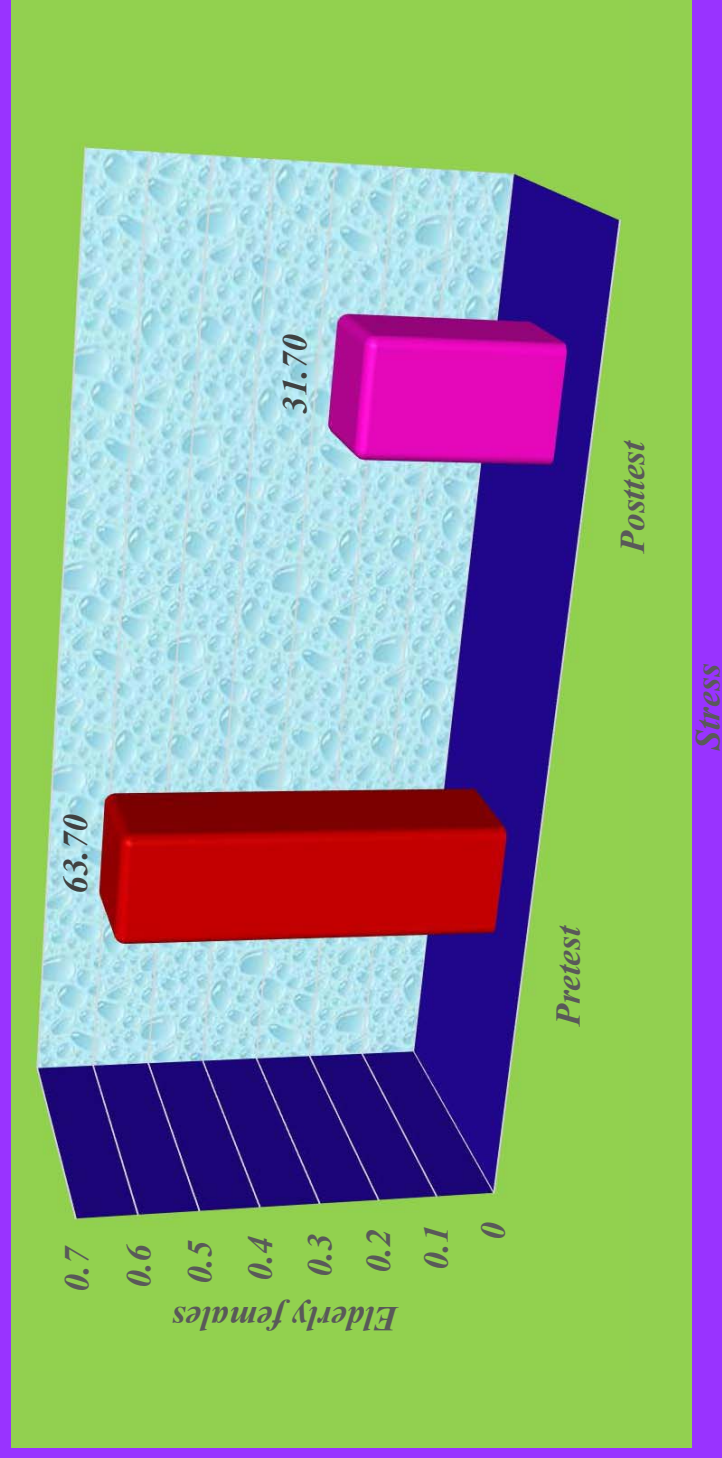


Fig 4.17 Effectiveness of guided imagery technique

Table 4.13 Distribution of association between level of stress reduction score and elderly people demographic variables

S. No	Demographic variables		Level of stress reduction score				Total	Chi square test
			Below average(≤40.32)		Above average (>40.32)			
			N	In %	n	In %		
1	Age	60- 65 years	11	35.5	20	64.5	31	χ²=5.40 p=0.02* DF= 1
		66 - 70 years	19	65.5	10	34.5	29	
2	Education	Primary	26	61.9	16	38.1	42	χ²=8.05 p=0.02* DF= 2
		Higher secondary	3	25.0	9	75.0	12	
		Graduate	1	16.7	5	83.3	6	
3	Marital Status	Married	8	72.7	3	27.3	11	χ²=4.58 p=0.20 DF= 3
		Single	3	33.3	6	66.7	9	
		Divorced / separated	2	28.6	5	71.4	7	
		Widowed	17	51.5	16	48.5	33	
4	No.of Children	1 (or) 2	11	47.8	12	52.2	23	χ²=0.73 p=0.69 DF= 2
		More than 2	11	57.9	8	42.1	19	
		No children	8	44.4	10	55.6	18	
5	Occupation	Government	1	100.0			1	χ²=1.11 p=0.77 DF= 3
		Business	4	44.4	5	55.6	9	
		Private	8	50.0	8	50.0	16	
		Others	17	50.0	17	50.0	34	
6	Financial Support	Old age pension	4	26.7	11	73.3	15	χ²=4.35 p=0.04* DF= 1
		Any other support	26	57.8	19	42.2	45	
7	Mode Of Admission	Referred by trust	11	50.0	11	50.0	22	χ²=3.16 p=0.20 DF=2
		By the children	5	83.3	1	16.7	6	
		Others	14	43.8	18	56.3	32	
8	Recreational activities	Watching TV	4	80.0	1	20.0	5	χ²=2.00 p=0.57 DF= 3
		Reading books	13	48.1	14	51.9	27	
		Talking with others	4	44.4	5	55.6	9	
		Others	9	47.4	10	52.6	19	
9	Duration of Stay	Below one year	8	33.3	16	66.7	24	χ²=8.87 p=0.05* DF= 3
		2-3 years	4	36.4	7	63.6	11	
		3-5 years	7	63.7	4	36.3	11	
		> 5 years	11	78.6	3	21.4	14	
10	Religion	Hindu	23	51.1	22	48.9	45	χ²=0.66 p=0.72 DF= 2
		Christian	3	37.5	5	62.5	8	
		Muslim	4	57.1	3	42.9	7	

* Significant at $P \leq 0.05$

** Highly significant at $P \leq 0.01$

*** Very high significant at $P \leq 0.001$

Table no. 4.13 the association between level of stress reduction score and their demographic variables. Younger, more educated, old age pensioners and less duration of stay elderly people were having more reduced stress score than others. Statistical significance was calculated using chi square test.

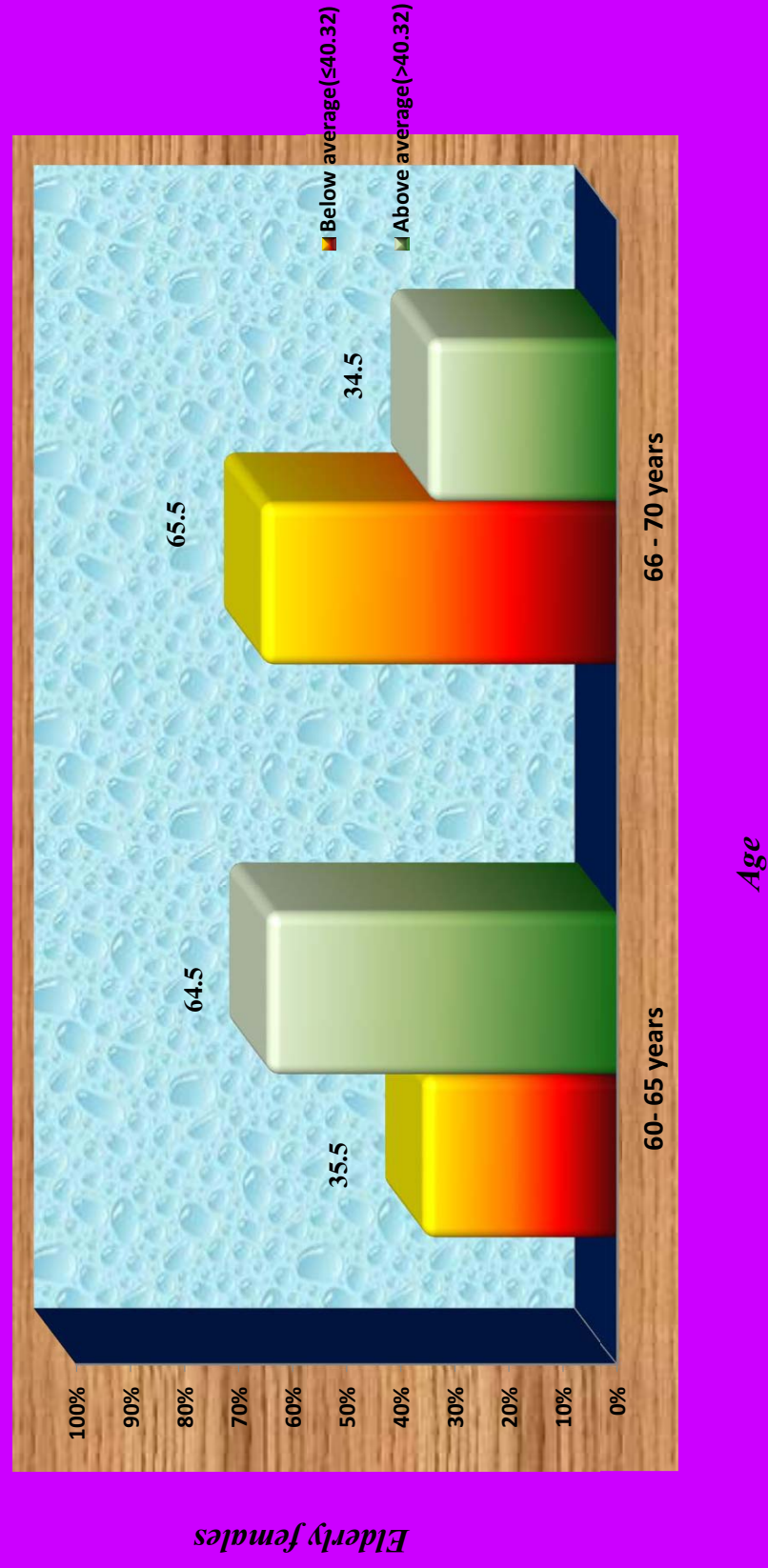


Fig.4.18 Distribution of association between level of stress reduce score with the age of the elderly females

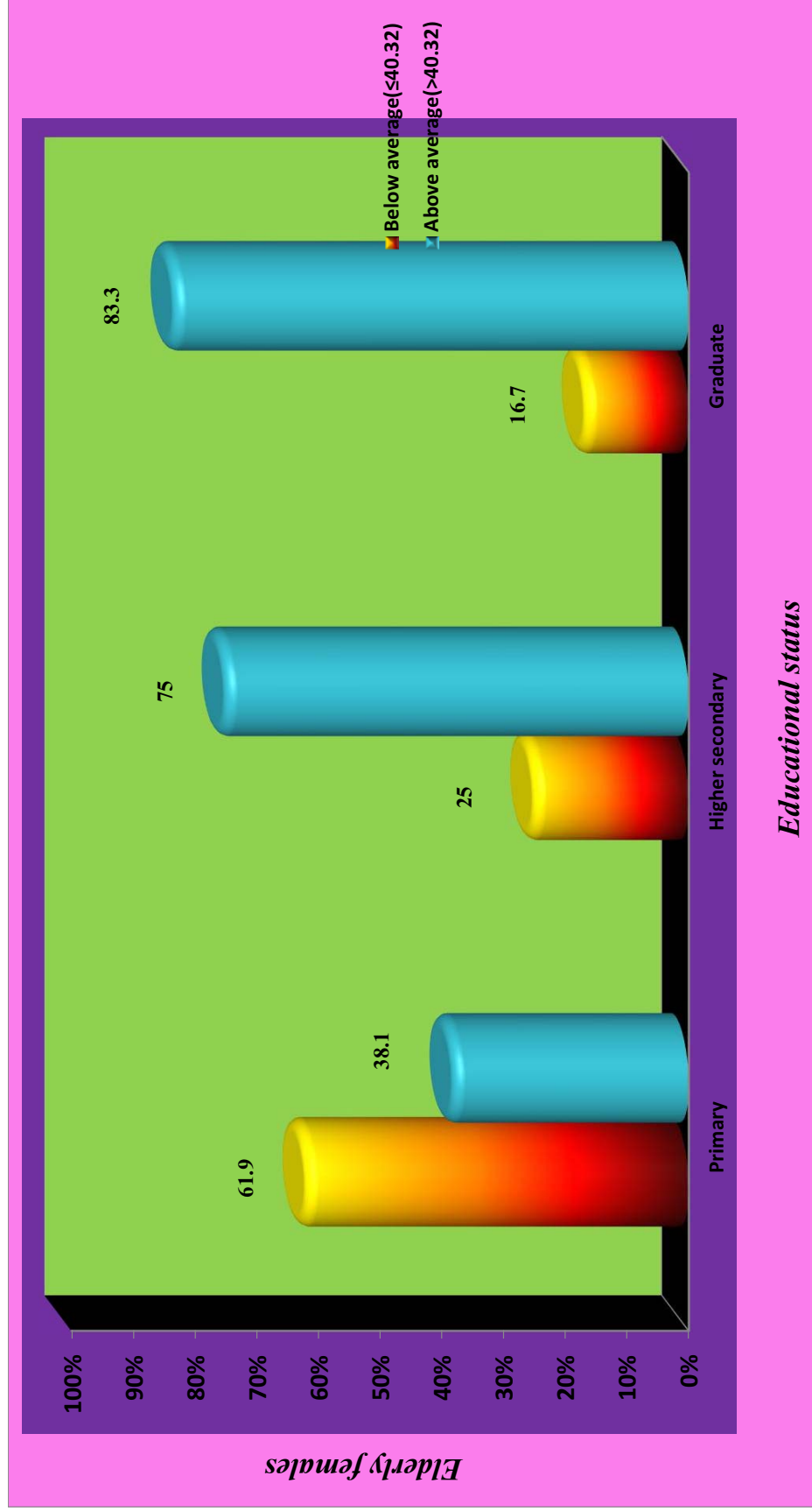


Fig 4. 19 Association between level stress reduction score and educational status

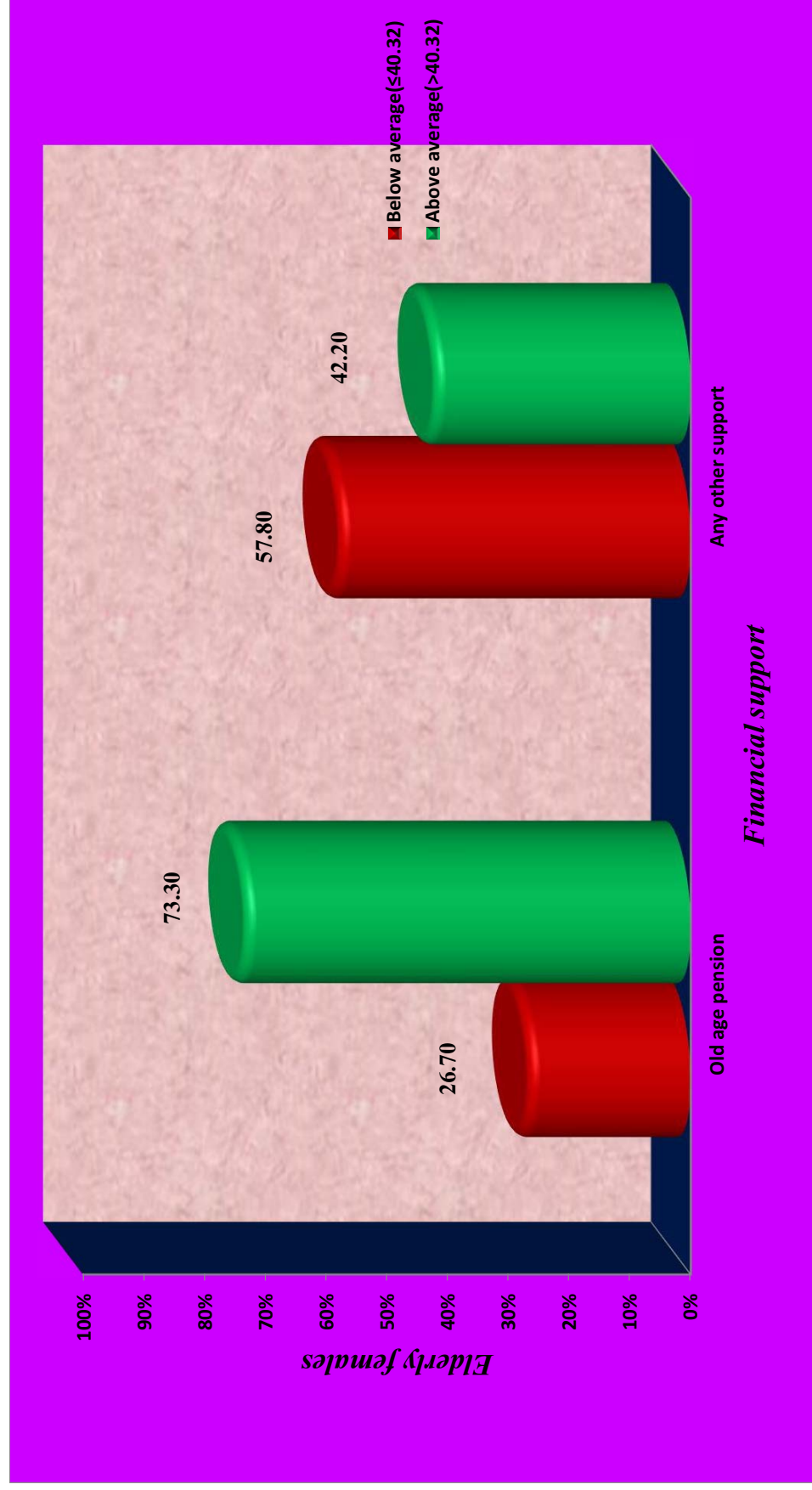


Fig 4.20 Association between level of stress reduction and financial support

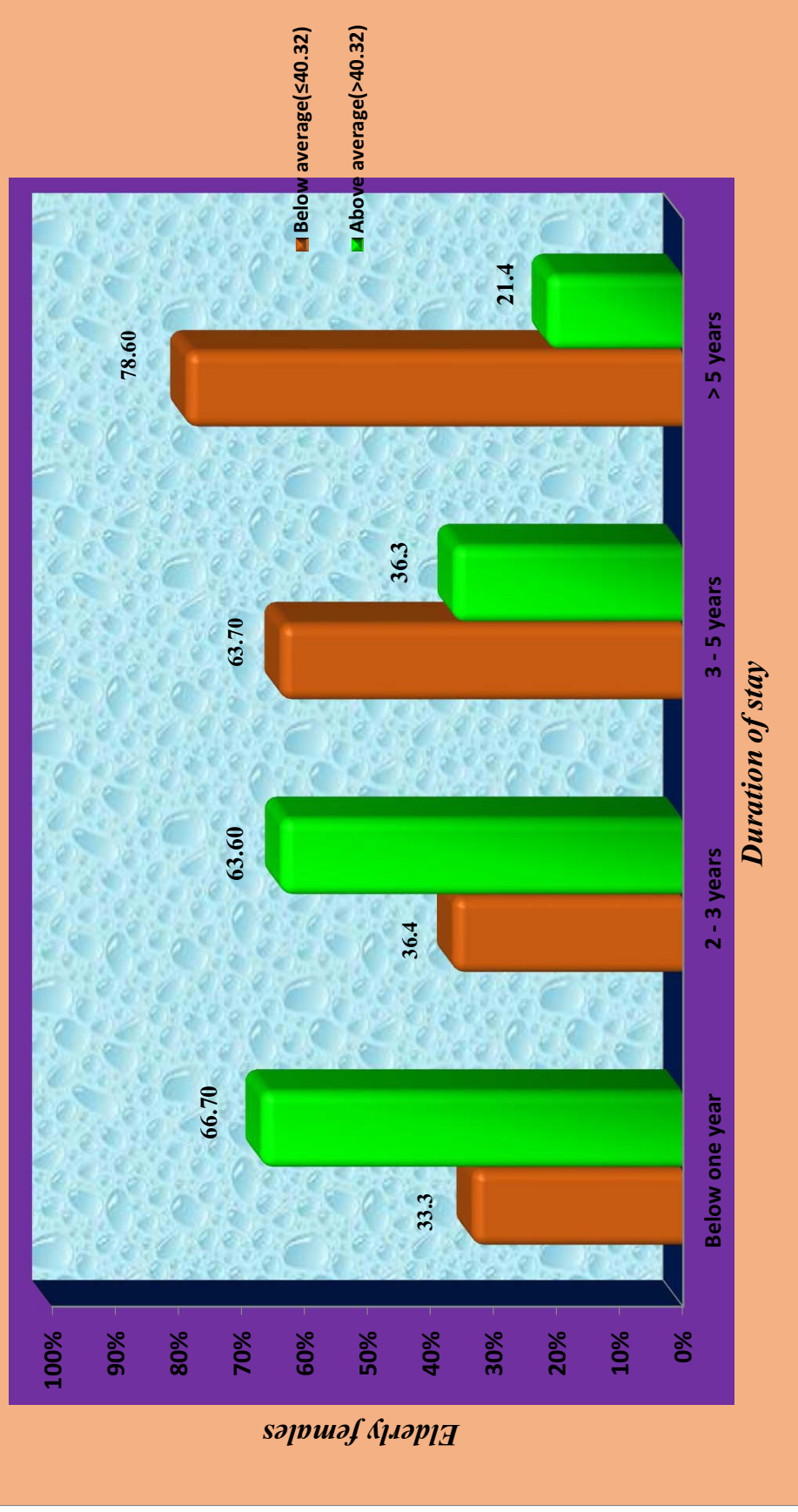


Fig 4.21 Distribution of association between level of stress reduction score and duration of stay



Fig 4.22 Shows the association between stress reduce and demographic variables

CHAPTER V

SUMMARY OF RESULTS

The researcher conducted a study to assess the effectiveness of guided imagery technique to reduce stress among elderly people in selected Old Age Home at Chennai. The data was collected for 4 weeks in selected Old Age Home, Chennai. The collected data were analyzed by using the descriptive statistics (percentage, mean, frequency and standard deviation) and inferential statistics (paired 't' test and chi square test). The study findings were discussed based on the objectives.

Major findings of the study

5.1 Findings of socio demographic profile of the elderly people

- Among the elderly people, majority of (51.7%) the elderly people belonged to the age group of 60- 65 years.
- Religion wise, most (75.0%) of the elderly people were Hindu.
- As far as the educational status the elderly people (70.0%) had primary education.
- Most of them (55.0%) were widowed.
- According to their occupational status, mostly (56.7%) they belonged to other jobs.
- About 88% of the elderly people had no sources of financial support and they belonged to the old age home only.
- Among the respondents, almost half of the people (45.0%) had no children.
- Most of the elderly (48.3%) got admitted into the Old Age Home on their own.
- As per their recreational activities, the elderly (45.0%) prefers reading books

- About 40% of elderly people were staying at the Old Age Home nearly below one year.

5.2 Finding the stress level of elderly people before guided imagery technique

Before administering the guided imagery technique, they had more score in stress (66.1%) and less score in depression (61.7%) overall their score was 63.7%. Grading of the stress level before guided imagery technique was moderate (11.7%) and 33.3% of them had severe stress and 55.0 % of them had extremely severe stress.

5.3 Finding the stress level of elderly people after Guided imagery technique:

In the post-test domain wise percentage of stress level of the elderly people after guided imagery technique was depicted in table was 30.0 % score in depression, 31.7 % in anxiety and 33.4 % in stress. Overall. Percentage of stress score was 31.7%.

In post-test, the stress level of elderly people after Guided imagery technique, 16.6% of them had Moderate Stress, 21.7% of them had mild stress, and 61.7% of them are normal level of stress.

In comparing mean stress score, the differences between pre-test and post-test was high and it was statistically significant ($P = 0.001$). Overall stress score of elderly people between pre-test and post-test difference is 17.98 which is statistically significant.

5.4 Finding the effectiveness of Guided imagery technique with regard to stress level in elderly people

The pre-test and post-test level of stress among elderly people before Guided imagery technique, none of them are normal, none of them are mild. 11.7% of the elderly had moderate stress, 33.3% of them had severe stress and 55.0% of them had extremely severe stress. After guided imagery technique, none

of the elderly had extremely severe, none of them had severe stress, 16.6% of them had moderate stress, 21.7% of them had mild stress and 61.7% of them are normal. The post-test stress score had statistically very high significance.

The comparison of overall stress score between pre-test and post-test, elderly people reduced 32.0% of stress after guided imagery technique. Hence the results showed that the effectiveness of the Guided imagery technique in reducing stress level among elderly was statistically significant with 95% CI and mean difference with 95% CI.

5.5 Finding of an association of stress with the selected demographic variables

There is a close association in the level of stress reduction and their demographic variables like age of elderly, educational status and duration of stay in the home are statistically significant in reducing stress level among elderly females.

CHAPTER VI

DISCUSSION

The data was statistically analyzed and the finding was discussed under the objectives formulated by the researcher.

Objective I: The socio demographic profile of the elderly people

Table 4.1: the demographic information of elderly people who participated in the study.

Out of 60 samples, most of them 51.7% were in the age group of 60 - 65 years. As education status of the elderly people, most of them 70.0% had primary education. Most of them 55.0% were widows, in view of children they had 38.3% 1 or 2 children, According to the occupational status 56.7% were other Employees. They not related to any government or private jobs. Most of the elderly people 75.0% were belonged to the old age home financial support only. With regard to the mode of admission the elderly people 53.3% were got admission by others. Higher proportion the 88.3% of the elderly people had no sources of financial support and they belong to the Old Age Home only. Among the respondents, almost half of the people 45.0% had no children. Most of the elderly people 48.3% got admitted into the old age home by their own. As per their recreational activities, most of the elderly 45.0% were prefers to read books. In view of duration of stay 40.0% were staying at the Old Age Home nearly below one year. Most of the elderly people 75.0% were Hindus.

The study was supported by Kenneth Wachter and Berkeley C A (2013) stress may greatly influence older adults and increase after 65 years. One quarter 25.5% adults over age 65 report stress, but 43.9% of those over age 75 report limitations in stress.

This study consistent with the study conducted by *Archana Singh and Nishi Mishra (2010)* on elderly belonging to different socioeconomic and varying demographic groups of Surat city. A total of 105 elderly people were interviewed comprising of 35 people each from the elderly living in the Old Age

Home. They were living in the affluent areas and living in the slums of city. A probability sample was obtained. The prevalence of stress was moderately high 39.04% among the elderly in their study population and it was observed that several important socio demographic variables had shown a significant association with stress in the elderly as follows 46.67% of elderly age group between 55- 65 years, 70% of them were female, 83.34 % of them belongs to Hindu, 63.34% of elderly had higher secondary, 66.7% of them were married, 80% of people from nuclear family and 23.33% of them was pensioner. The study revealed that there would be 6% to 50% prevalence rates on stress in the community samples of the elderly in India.

Objective II: To assess the level of stress among the elderly people before the guided imagery technique

The result of domain wise percentage before guided imagery technique and the overall stress score was 63.7%. The elderly people had negative emotions pertaining to stress was 61.7% and less negative emotions regarding depression was 46.7%. In general 55.0% of the elderly people had extremely severe level of stress, 33.3% of them had severe stress, 11.7% of them had moderate stress, and none of them had mild stress and none of the elderly were normal.

This study consistent with the study which was conducted by **Mrs.Dalbirkaur (2014)** on guided imagery technique among elderly people with stress. It was observed in pretest of experimental group 1 (3.3%), 0, 29 (96.66%) subjects' falls in mild moderate, severe stress respectively. Control group had 1 (3.3%), 2 (6.6%) and 27 (90%) mild, moderate and severe level. In posttest, there was no decrease level of stress among control group as compared to pretest of experimental group after guided imagery technique 20-25 minutes daily for 15 days. Only 5 (16.6 %) elderly people remained in severe stress after guided imagery technique. It showed that shifting of samples in various level of stress due to guided imagery technique in experimental group only.

Objective III: To assess the level of stress among the elderly people after guided imagery technique.

The level of stress score after the guided imagery technique none of them had extremely severe and severe stress, and 21.7% of them had mild stress and 16.6% of them had moderate stress level. Finally 61.7 % of the elderly people were normal.

This study consistent with the study conducted by **Christopher Fisher (2012)** based on guided imagery reduces significantly pain, depression and anxiety and improves sleep among patients suffering from fibromyalgia. They undertook a basal test at beginning of the treatment, a post test after four weeks of intervention. Then the researcher measured a number of variables associated to main symptoms. Then patients were given the chance to participate in their own treatment through an understanding of their condition. The results were compared and guided imagery had great influence on the symptoms.

The study was supported by **Carolyn Aldwin and Loriena A.Yancura (2010)** although older adults are thought to experience more stress and to be more vulnerable to its adverse effects and concluded the study that older individuals have learned to appraise and cope with stress by relaxation techniques.

Objective IV: To determine the effectiveness of guided imagery technique among the elderly people.

The effectiveness of guided imagery technique the overall pretest score among the elderly people was 80.26 with standard deviation of ± 15.71 and in posttest, it was 39.94 with standard deviation of ± 5.61 . So the differences were high.

As per H_1 , there was an effectiveness of guided imagery technique in reduction stress among elderly people in selected Old Age Home. Hence the hypothesis was proved.

This study consistent with the study conducted by **Khaskey A D and Smith JC (2009)** on the effect of guided imagery technique on stress and anxiety. One hundred and fourteen participants in 4 groups practiced 25 minutes of guided imagery relaxation training, and some other task. The participants were tested by Smith Quick Stress Test before and after training. In the post test, guided imagery relaxation had an effect on the stress which helped the individual to cope.

The finding was supported by a study conducted by **Elizabeth Scott (2010)** about using guided imagery technique for stress management. He stated that guided imagery technique was found to provide significant stress reduction benefits by quickly relaxing the body, physically and efficiently. It also helped them to reduce stress and manage their life better.

Objective V: Associate the effectiveness of guided imagery technique with selected demographic variables.

The level of stress was reduced with their demographic variables. Variables like age of elderly people, educational status and duration of stay showed statistically significant association in reducing stress level among elderly females.

This study consistent with the study which was conducted by **Baider. L (2010)** on guided imagery technique among elderly people with stress. The association of stress and guided imagery with selected socio demographic variables such as age, gender, religion, marital status, type of family and economical support was statistically non-significant except gender, education and duration of stay in the pretest of experimental group. It was found association with the guided imagery technique at the level of 5% that is $2.52 > 1.960$ means females have more level of stress. The group has shown a dramatic change in the level of stress by guided imagery technique at selected old age home.

As per H_2 , this study proved that there is statistically significant association between the post-test stress scores with selected socio demographic variables.

CHAPTER VII

CONCLUSION AND RECOMMENDATIONS

7.1 Limitations

- ❖ The study was limited to the female elderly in the age group of 60 – 70 years.
- ❖ Sample size of 60 female elderly.
- ❖ The study was limited to the selected Old Age Home at Chennai.
- ❖ The data collection was restricted only for 4 weeks.
- ❖ The stress level was assessed based on the score obtained.
- ❖ The study findings cannot be generalized

7.2 Implication of the study

According to the findings of the study, majority of the samples experienced stress. When samples are at stress with inadequate coping, they are vulnerable to psychiatric disorders like depression, suicidal tendencies, and anxiety. Guided imagery technique is effective in reducing stress. Therefore nurses have the responsibility in conducting Guided imagery technique by practical demonstration for patients under stress.

The findings of the study have implications for nursing education, nursing practice, nursing research and nursing administration.

7.2.1 Nursing practice

Nursing personnel is in the best position to impart knowledge in the hospital. Guided imagery technique needs a skill that can be taught by nurses who knows both inpatient and outpatient background. That encompasses the nurse's role care giver, educator, role model, and health promoter.

- Psychiatric nurse must have the skills in teaching about stress reduction measures.

- Self-instructional material regarding reduction of stress can be distributed to the people.
- The nurse must have the skills to avoid manual pressure.
- There is no need for any specific preparation to provide Guided imagery technique.

7.2.2 Nursing administration

Health personnel have a vital role in providing relaxation to the patients as well as to the staff nurse. Guided imagery technique is cost effective, it has been shown to reduce the hospital length of stay. These techniques offer a resource for nurses to use themselves to reduce the load of the stress of a demanding work environment, and may even be used before performing new nursing procedures that invoke anxiety.

- Proposed to health administration to strategically plan and meet the health needs of risk group.
- The administration both private and Govt sectors should take initiatives to relieve stress.
- The administration can encourage the nurses for conducting research aspects for prevention of stress.
- The administration can organize conferences, workshops and seminars for nurses working in the hospital and other health care setting.

7.2.3. Nursing Education

Guided imagery technique is one of the important treatment modality in the mental health nursing. Basic education of nursing should include detailed aspect of Guided imagery technique with proper training on the practical application, so the nursing students will develop proper knowledge and skill on how to provide Guided imagery technique for patients.

- Nursing curriculum focuses to develop skills in identifying the stress level and its management.

- Conferences, workshops and seminars can be held for nurses to reduce stress and positive attitude.
- Arrange in-service education to update their knowledge regarding stress reduction measures.
- Make available literature related to guided imagery technique.

7.2.4 Nursing research

Practice emerges from research, and evidence based practice improve the quality of nursing care. This study focuses on improving the quality of nursing care to the patients with stress. Research adds value to the comprehensive and holistic care. The nurse of service side need to educate the patients and enrich the evidence based care. Nurses can also involve in this type of research.

- This study will be a valuable reference material for further researcher.
- The results of study encourage the management to adopt Guided imagery technique for relieving stress.
- Adequate allocation of funds, manpower, time, adequate training should be provided to the nurses for conducting this research.
- Research can be done to find out the effectiveness of Guided imagery technique which helps to reduce stress among elderly people.

7.3 Recommendations for further study

Keeping in view, the finding and limitations of the present study following recommendations are offered for further research.

- A similar study can be undertaken on a large sample in different setting
- Similar studies can be carried out to assess the effectiveness of Guided imagery technique in overcoming stress on the working women.
- A similar study can be done for mothers of school going children.
- The study can be carried out on a particular mental disorder among the patients in the hospital setup.

- A study can be carried out to determine the effectiveness of guided imagery technique in reducing anxiety among pre-operative patients,
- A comparative study can be conducted to assess the effectiveness of other complimentary therapies on stress.
- A similar study can be done in geriatric wards and guided imagery can be practiced.

Conclusion

The intensity of stress varies from one individual to another over a period, depending on the demand made by the event and the person's ability to cope up with it. A certain amount of stress is desirable to facilitate the desired response and to spur the individual to be active and goal directed, but too much of stress retards the ability to function normally and think logically. Over the past 25 years, the effectiveness of guided imagery has been increasingly established by research findings that demonstrate its positive impact on health, creativity and performance. One of the most appealing and forgiving features about guided imagery is that almost anyone can use it. Guided imagery skips across the barriers of education, class, race, gender and age. Stress can cause severe health problems and, in extreme cases, it can cause death. While stress management techniques have been shown to have a positive effect on reducing stress.

Stress is universal and of relevance to all, a more thorough understanding of stress management technique is essential for preventing stress related disease and enhancing health overall. Stress reduction technique constitute a safe and effective approach for reducing stress. The study brings to light on vulnerability of stresses among participants.

This chapter enlighten the importance of this research and revealed that reduction in the level of stress among elderly people was significant.

BIBLIOGRAPHY

Reference Books

- 1) Aldwin CM (2002). “*Stress, coping and development: An integrative perspective*”. New York: Guildford, 1-49.
- 2) Basavanthappa B. T. (2003). “*Nursing Research*”. 1st edition, Bangalore: Jaypee brother’s medical publishers, 118.
- 3) Bhatia M.S. (1977). “*A Concise Textbook of Psychiatric Nursing*.” New Delhi, C.B.S publishers.
- 4) Caplan Gerald. D (1964). “*Principles of preventive psychiatry*” New York: Wiley, 1-49.
- 5) Crookes. A. Patrick, Davis Sue, (1998) “*Research into Practice*” Second Edition, Edinburgh, Tindal, PP. No 133-141
- 6) David M. Kevin J.K. (1982) “*Psychiatric Nursing*”, 5th Edition London Churchill Livingstone.
- 7) Dr. Suresh K. Sharma (2013), “Nursing Research and Statistics”-reprint 2013 published by Elsevier, a division of Reed Elsevier India (pvt) ltd.
- 8) Elizabeth M(1998), “*Foundation of Psychiatric Mental Health Nursing*”, 3rd edition; Philadelphia; W B Saunders Company.
- 9) Fadem Barhara(2004)”*Behavioural Science in Medicine*, 1st edition; Philadelphia; Lippincott.
- 10) Fortinash.M.k.Frisch.L.E (2002) “*Psychiatric Mental Health Nursing*” I Edition Missouri: Mosby Publisher.

- 11) Gail.W.Stuart (2005), "***Principles and Practice of Psychiatric Nursing***"
" seventh edition, Philadelphia Mosby Health Science Company
- 12) Gupta. S. P. (1998) "***Statistical Methods***" 28th Edition New Delhi:
Sultan Chand and Sons Publishers.
- 13) James .F.A (2003 "***Reading Understanding and Applying Nursing Research***" 2nd Edition Philadelphia; F.A Davis Company.
- 14) Kaplan & Shaddock (2015) "***Synopsis of Psychiatry***" 10 Th Edition,
Wolter Kolver: Lippincott Williams and Wilkins.
- 15) Kothari. C.R. (2007). "***Research Methodology Methods and Techniques***". 2nd Edition. New Delhi: Wiswa Parkas publication. 39-67.
- 16) Lalitha.K (2010) "***Mental Health and Psychiatric Nursing***" 4th Edition
Bangalore. VMG book House.
- 17) Lazarus R.S. and Folk man (1996). "***Psychological stress and the coping process***", 3rd Edition, New York: Mc Graw-Hill, 1-56.
- 18) Mary Ann Boyd. (2008) "***Psychiatric Nursing***" 4th edition New Delhi:
Wolters and Kluwer
- 19) Mary C Townsend (2003) "***Essential of Psychiatric Mental Health Nursing***", 5 th Editions, Philadelphia: F.A. Davis Company.
- 20) Melanie (2002), "***Theoretical Basic for Nursing***", 1st edition;
Philadelphia; Lippincott and Wilkins.
- 21) Nancy.B.Grove.K.S (1999) "***Understanding Nursing Research***" 2 nd
Edition New Delhi, Harcourt Publishers.

- 22) Neeraja.K.P. (2008) “***Essential of Mental Health and Psychiatric Nursing***” 1st Edition, New Delhi, Jaypee Brothers Publications.
- 23) Polit.F.Demise and Hunglers, P. Bernadette (1999) “***Nursing Research and Principles and Methods***” 6th Edition, Philadelphia: Lippincott Williams and Wilkins
- 24) Purl. B. K.et.al (2002) “***Text Book of Psychiatric***” London: Churchill Living stone Publishers.
- 25) Sreevani R (2007), “ ***A guide to Mental Health and Psychiatric Nursing***” 4th edition, New Delhi, Jaypee brothers and publishing company. 102 -107.
- 26) Stuart and Sudan (2008) “***Principles and Practice of Psychiatric Nursing***”, 9th Edition, Mosby publishers, Philadelphia.
- 27) Wong. D.L (2005) “***Whaley’s and Wang’s Essentials of Psychiatric Nursing***” St. Louis Mosby publication.

Journals

- 1) An evidence based application of Guided Imagery and Its Impact on Resilience and Stress in Military/DOD nurses at risk for PTSD- the Catholic University of America, ProQuest Dissertations Publishing, 2012.
- 2) **Anderson**, “The effects of Guided Imagery and Music therapy on reported change in normal adults”, Journal of Music Therapy (2001), vol. 36
- 3) **Archana Singh and Nishi Mishra**: Loneliness, depression and sociability in old age, Industrial Psychiatry Journal, Volume 18 (1) 2009, 50-55
- 4) Archives of Gerontology and Geriatrics Loneliness, health and social network among elderly people—a follow-up study, Karin Holmén, Hidetochi Furukawa^d Volume 35, Issue 3, November–December 2011, Pages 261–274
- 5) **Baider L.** “Progressive Muscle relaxation and Guided imagery”, Journal of General hospital psychiatry, (1994) vol.16.
- 6) **Banerjee G. Nandhi S. Sarkar S. Boral G.C & Gosh A.** “The vulnerability of Indian women to suicide a field study” Indian Journal of Psychiatry (2010) 305 – 308.
- 7) **Bhuvaneswari B.** “Ways to manage stress”, Journal of Nightingale Nursing times, (2009) vol.5 Issue 3.
- 8) **Bloom B.** “Stressful life event theory and research”, Implications for primary prevention (1985). Chen, Guanghua, PhD; Shen, Huizhang, PhD; Chen, Guangming, PhD **Canadian Journal of Psychiatry** 57.9 (Sep 2012): 547-53.
- 9) **Carolyn Aldwin and Loriena A.Yancura** Psychological disorders of elderly home residents. Journal of Applied Science, Volume 9, 2009,

- 10)**Choudry S. Chairman T.** Adolescent development of motor imagery in a visually guided pointing task, “Journal of Psychological in Nursing” (2010) 886-887.

- 11)Clinical Research; Recent Data from A. Charalambous and Co-Authors Highlight Findings in Clinical Trials and Studies Da Roza J M. Biochemical stress of caring, Indian Journal of Psychiatry (2011) 475 – 478.

- 12)**Deepthi.R:** Visual and Hearing impairment among rural elderly of South India: A community base study Geriatrics & Gerontology international, Volume 7, 2011, 45-50

- 13)**Diane Tusek,** “Guided Imagery as a coping strategy for perioperative patients”, American Journal (2010) vol.20.

- 14)Effects of Guided Imagery on Postoperative Outcomes in Patients Undergoing Same-Day Surgical Procedures: Gonzales, Eric A, Ledesma, Rachel J A, McAllister, Danielle J, Perry, Susan M, Dyer, Christopher A, et al. **AANA Journal** 78.3 (Jun 2010): 181-8.

- 15)Effects of guided imagery on the level of stress experienced by pre-licensure baccalaureate nursing students engaged in clinical learning experiences pare, judith m.. Capella university, proquest dissertations publishing, 2014.

- 16)**Elizebeth Scott A** (2009) “guided Imagery Therapy for stress management”,Achives of psychiatry Nursing

- 17)**Ellser L.** Guided Imagery is an effective too to reduce stress, Journal of psychiatry nursing (2011)

- 18)**Eun A. Cho (2014)** subconscious guided imagery therapy with hypothesis. American Clinical Hypothesis, (2008) 232-234.

- 19)Evidence-Based Complementary and Alternative Medicine Volume 2013 (2013),The Effect of Guided Imagery on Stress and Fatigue in Patients with Thyroid Cancer Undergoing Radioactive Iodine Therapy
- 20)**Gopal.k.Ingle&Anita Nath**: Geriatric health in India, concerns and solutions, department of community medicine, Maulana Azad Medical College, New Delhi, India, Issue : 4, 2008, 214-218.
- 21)**Grigby J.P** “The use of guided imagery therapy in the treatment of post-traumatic stress disorder”, European Journal of Psychiatry.
- 22)Healing Touch With Guided Imagery for PTSD in Returning Active Duty Military: Jain, Shamini,, McMahon, George F, NC USN; Hasen, Patricia, NC USN; Kozub, Madelyn P, NC USN;Porter, Valencia, MD, MPH; et al. Military Medicine 177.9 (Sep 2012): 1015-21.
- 23)**Journal of gerontology**; Stressful Events and Symptoms among Old Women and Men: A Longitudinal Study, Kee – Lee Chout and Iris Chi The University of Hong Kong 2015
- 24)**Kamala Raj**: Psycho social status of Senior citizen and related factors, Journal of human ecology, volume 22 (3), 2009.
- 25)**Keekrbom K L Wanta B**. “Effect of guided imagery therapy”, Journal of Pain symptoms Management. 604 – 612.
- 26)**Kenneth Wachter and Berkeley C A** (2010) Alternative and complementary therapy for stress and anxiety, Journal of psychosocial in Nursing. 132 – 140.
- 27)**Leuncer H**. “Guided Affective Imagery (GAI). A method of Intensive Psychotherapy”. American Journal of Psychotherapy Vol.23.

- 28) **Mohd Aznan Md Aris:** Physical and mental health problems of elderly in nursing homes in Kuantan, International Medical journal, Volume 6,2007, 12-18.
- 29) **Mrs.Dalbir kaur (2014)** Anxious, depression among older adults: Clinical and phenomenological correlates, aging and mental health, volume 4, 2000, 268-274.
- 30) **Murray CJ, Lopez AD:** Alternative projection of mortality and disability by cause1990-2020, Global Burden of disease study, volume-3, 1997. 498-15. Psychology & Psychiatry Journal (Aug 29, 2015): 365.
- 31) **Ramesh S.** “Mental Imagery”. Journal of Nightingale nursing times (2010), Vol 5, Issue 8.
- 32) **SherinaLekhraj&mustaqim:** Physical and mental Health of elderly in a Rural community of Sepang, Selangor, Malaysia Journal of medical Science, Volume 11 . 2004. 52-59.
- 33) Tehran University of Medical Sciences, Nursing and Midwifery Care Research Center, School of Nursing and Midwifery, Tehran, Iran
- 34) The Effects of Guided Imagery on Affect, Cognition, and Pain in Older Adults in Residential Care: Thailand Elsegood, Kelly J., BA (Hons), dclinpsych; Wongpakaran, Nahathai, MD, frcpsycht. **Research in Gerontological Nursing** 5.2 (Apr 2012): 114-22.
- 35) Using Mental Imagery to Deliver Self-Regulation Techniques to Improve Sleep Behaviours Marisa H. Loft, PhD & Linda D. Cameron, PhD Published online: 3 May 2013.
- 35) **Vikram Patel:** Aging and mental health in a developing country; that cares? Qualitative studies from Goa, psychological medicine, volume 31, Issue 01, 2001. 29-38.

- 36) **WHO:** Healthy Aging, Practical pointers on keeping Well, WHO Western Pacific Region. Women's Health; Studies from N. Jallo and Co-Researchers Yield New Data on Pregnancy (Perceptions of Guided Imagery for Stress Management in Pregnant African American Women) Women's Health Weekly (Sep 10, 2015): 784.

Net references

- 1) [http:// www.webstatscher.com/stats/ domain/ aeriagloris.com](http://www.webstatscher.com/stats/domain/aeriagloris.com)
- 2) [http://search proquest.com](http://search.proquest.com)
- 3) [http:// www. Stress article /Top7 stress Quotes.htm](http://www.Stressarticle.com/Top7stressQuotes.htm)- United states.
- 4) [http:// www. Stress relief tools.com / long term effects of stress on the body.](http://www.Stressrelieftools.com/longtermeffectsofstressonthebody)
- 5) [http:// www.pubmed result.htm.](http://www.pubmedresult.htm)
- 6) [http:// www.stress.org](http://www.stress.org)
- 7) <http://www.academyforguidedimagey.com>
- 8) <http://www.guidedimageryinc.com>
- 9) <http://www.holisticonline.com>
- 10) <http://www.mindtools.com>
- 11) <http://www.selfguided.com>
- 12) [http:// www.stressmanagementtips.com/family.htm](http://www.stressmanagementtips.com/family.htm)

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI-3

EC Reg No.ECR/270/Inst./TN/2013
Telephone No. 044 25305301
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CERTIFICATE OF APPROVAL

To
Mrs. ANARKALI. A,
M.Sc., (Nursing),
College of Nursing,
Madras Medical College,
Chennai - 600 003.

Dear Mrs. ANARKALI. A,


The Institutional Ethics Committee has considered your request and approved your study titled **A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED IMAGERY TECHNIQUE IN REDUCTION OF STRESS AMONG ELDERLY PEOPLE IN SELECTED OLD AGE HOME AT CHENNAI. No.25102014.**

The following members of Ethics Committee were present in the meeting held on 21.10.2014 conducted at Madras Medical College, Chennai-3.

- | | |
|---|----------------------|
| 1. Dr.C.Rajendran, M.D., | : Chairperson |
| 2. Dr.R.Vimala, M.D., Dean, MMC, Ch-3 | : Deputy Chairperson |
| 3. Prof.B.Kalaiselvi, M.D., Vice-Principal, MMC, Ch-3 | : Member Secretary |
| 4. Prof.R.Nandhini, M.D., Inst.of Pharmacology, MMC | : Member |
| 5. Prof.K.Ramadevi, Director i/c, Inst.of Biochemistry, MMC | : Member |
| 6. Prof.Saraswathy, M.D., Director, Pathology, MMC, Ch-3 | : Member |
| 7. Prof.S.G.Sivachidambaram, M.D., Director i/c, Inst.of Internal Medicine, MMC | : Member |
| 8. Dr.Raghumani, M.S., Professor of Surgery, MMC | : Member |
| 9. Thiru S.Rameshkumar, Administrative Officer | : Lay Person |
| 10.Thiru S.Govindasamy, B.A., B.L., | : Lawyer |
| 11.Tmt.Arnold Saulina, M.A., MSW., | : Social Scientist |


We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.


Member Secretary, Ethics Committee

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms. Anarkali. A. M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled "A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home at Chennai" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.


B. SUDHAKARAN, M.Sc. (C.Psy).
SIGNATURE WITH SEAL
RCI Registration No. A07047
Assistant Professor of Psychology cum
Clinical Psychologist,
Institute of Mental Health, Chennai-10

NAME : B. SUDHAKARAN
DESIGNATION: ASST. PROF OF Psychology cum clinical Psychologist
COLLEGE : Institute of Mental Health.

PLACE:

DATE:

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SENIOR CIVIL SURGEON
INSTITUTE OF MENTAL HEALTH
KILPAON, CHENNAI 10
SIGNATURE WITH SEAL

NAME : DR. V. Venkatesh Malhan Kumar
DESIGNATION: Associate professor
COLLEGE : Madras Medical college

PLACE: Chennai

DATE:

CERTIFICATE FOR CONTENT VALIDITY

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SIGNATURE WITH SEAL

NAME : MRS. CATHERINE BABY SOHASINI

DESIGNATION: LECTURER

COLLEGE : MADHA COLLEGE OF NURSING

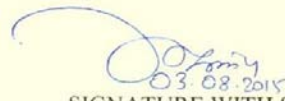


PLACE: CHENNAI

DATE: 15.07.2015

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms. Anarkali. A. M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home at Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.


03.08.2015
SIGNATURE WITH SEAL
JOURNAL OF SCHOOL SOCIAL WORK
No. 8, (NEW 14), SRIDEVI COLONY,
7th AVENUE, ASHOK NAGAR,
CHENNAI - 600 083, TN.

NAME : Prof. P. J. Narayan
DESIGNATION: Editor, Journal of School Social Work
Visiting Professor
COLLEGE : 1. LISTAR, Loyola,
2. Vikrama Simhapuri University Nellore.

PLACE: Chennai

DATE: 03.08.2015

CERTIFICATE FOR CONTENT VALIDITY

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SIGNATURE WITH SEAL

NAME : K. Vijayalakshmi.
DESIGNATION: Professor.
COLLEGE : Apollo College of Nursing, Chennai - 95.

PLACE: Chennai.
DATE: 1.08.2015.

From:

Mrs. Anarkali. A
M.Sc. (N) II year,
College of Nursing,
Madras Medical College,
Chennai - 600003.



To:

The Managing Director,
Vishranthi Home for aged destitute women,
No. 4/227, MGR Salai,
Palavakkam,
Chennai - 600 041.

Through Proper Channel

Respected madam,

Sub: Requesting for permission to conduct a Nursing Research Study-Reg.

I ANARKALI. A, M.sc Nursing II year, College of Nursing, Madras Medical College, request you to kindly grant me permission to conduct Nursing Research Study on the topic 'A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED IMAGERY TECHNIQUE IN REDUCTION OF STRESS AMONG ELDERLY PEOPLE AT SELECTED OLD AGE HOME AT CHENNAI'. As partial fulfilment of dissertation study for the degree of Master of Science in Nursing.

I assure you that it will not interfere with the routine activities of the study settings as well as keep confidentiality and anonymity of each elderly people.

Thanking you

Place: Chennai-03.

Date : 06/07/2015

Yours obediently

(ANARKALI. A)

Principal
06.07.15
PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003

Permission granted

For VISHRANTHI CHARITABLE TRUST

Administrative Officer



A National Monthly dedicated to networking of parents and teachers

Certificate

This is to Certify that..... *Anarkali A.*
M.Sc., (Psychiatric Nursing) had undergone an intensive
training programme (part-time) in **Guided Imagery Therapy**
from..... **01-07-2015**to..... **31-07-2015** and had
been awarded **D** Grade after an objective evaluation
of her skills in Voice Modulation (85%), Induction (90%),
Message Inclusion (85%) and Debriefing (85%).

She is capable of conducting Guided Imagery
Therapy sessions independently & effectively.

Key:

Grade A: 51% - 60% B: 61% - 70% C: 71% - 80% D: 81% - 90% E: Above 90%



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7th AVENUE, ASHOK NAGAR,
CHENNAI - 600 083.

Jayachandran Naidu P MA, MED, DCP,
Cognito-Academic Consultant
Editor, Journal of School Social Work

INFORMED CONSENT

Investigator : **A. Anarkali**

Name of Participant :

Age/sex :

Date :

Name of the institution : **Selected Old Age Home at Chennai.**

Title : **“A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people at selected old age home, at Chennai”.**

Documentation of the informed consent: (legal representative can sign if the participant is minor or competent).

- I _____ have read/it has been read for me, the information in this form. I was free to ask any questions and they have been answered. I am over 60 years of age and exercising my free power of choice, hereby give my consent to be included as a participant in the study.
- I have read and understood this consent form and the information provided to me.
- I have had the consent document explained in detail to me.
- I have been explained about the nature of my study.
- My rights and responsibilities have been explained to me by the investigator.
- I agree to cooperate with the investigator
- I have not participated in any research study at any time.
- I am aware of the fact that I can opt out of the study at any time without having to give any reason

- I hereby give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities, government agencies and Institutional ethics committee. I understand that they are publicly presented.
- My identity will be kept confidential if my data are publicly presented.
- I am aware that I have any question during this study; I should contact the concerned investigator.

Signature of Investigator

Signature of Participants

Date

Date

INFORMATION TO PARTICIPANTS

Title : “A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home, at Chennai”.

Name of the Participant :

Date :

Age/sex :

Investigator : A. Anarkali

Name of the institution : Selected old age home at Chennai.

Enrolment No :

You are invited to take part in this study. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to Cooperate in this study being conducted in selected old age home at Chennai.

What is the Purpose of the Research (explain briefly)

This research is conducted to evaluate the effectiveness of Guided imagery technique among the elderly people at selected old age home. We have obtained permission from the Institutional Ethics Committee.

Study Procedures

- Study will be conducted after approval of ethics committee
- A written formal permission will be obtained from authorities of old age home to conduct study.
- The investigator will assess the stress level of each participant before the procedure using a stress scale.

- Guided imagery technique will be performed by the investigator daily for 7 days. The procedure of Guided imagery technique will be explained with the help of pictures of each step. Following that the level of stress will be assessed after 7 days.

Possible benefits to other people

The result of the research may provide benefits to the elderly people and also empathetic care to them by investigator.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your personal details. The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

How will your decision not to participate in the study affect you?

Your decisions not to participate in this research study will not affect your activity of daily living, medical care or your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during course of the study without giving any reasons.

Your Privacy in the research will be maintained throughout study. In the event of any publications or presentation resulting from the research, no personally identifiable information will be shared.

Signature of Investigator

Signature of Participants

Date

Date

APPENDIX – I

Section – A

Socio demographic data of the elderly people

Read the following question and put a tick mark (✓)

1. Age in years

- a) 60 – 65 ☐
- b) 66 - 70 ☐
- c) Above 70 ☐

2. Religion

- a) Hindu ☐
- b) Christian ☐
- c) Muslim ☐
- d) Others ☐

3. Marital status

- a) Married ☐
- b) Single ☐
- c) Divorced / separated ☐
- d) Widowed ☐

4. Education

- a) No formal education ☐
- b) Primary ☐
- c) Higher secondary ☐
- d) Graduate ☐

5. Occupation

- a) Government ☐
- b) Business ☐
- c) Private ☐
- d) Others ☐

6. Financial support

- a) Old age pension
- b) Government Pensioner
- c) Any other support

7. Number of children

- a) 1 (or) 2
- b) More than 2
- c) No children

8. Mode of admission

- a) Referred by trust
- b) By the children
- c) others

9. Recreational activities

- a) Watching TV
- b) Reading books
- c) Talking with others
- d) Others

10. Duration of stay

- a) Below one year
- b) 2-3 years
- c) 3-5 years
- d) More than 5 years

SECTION –B

Questionnaire on assessing the stress level of elderly people

Name:

Date:

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no rights or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 - Did not apply to me at all
- 1 - Applied to me to some degree, or some of the time
- 2 - Applied to me to a considerable degree, or a good part of time
- 3- Applied to me very much, or most of the time


1	I found myself getting upset by quite trivial things	0 1 2 3
2	I was aware of dryness of my mouth	0 1 2 3
3	I couldn't seem to experience any positive feeling at all	0 1 2 3
4	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0 1 2 3
5	I just couldn't seem to get going	0 1 2 3
6	I tended to over-react to situations	0 1 2 3
7	I had feeling of shakiness (e.g. legs going to give way)	0 1 2 3
8	I found it difficult to relax	0 1 2 3
9	I found myself in situation that made me so anxious I was most relieved when they ended	0 1 2 3
10	I felt that I had nothing to look forward to	0 1 2 3

11	I found myself getting upset rather easily	0 1 2 3
12	I felt that I was using a lot of nervous energy	0 1 2 3
13	I felt sad and depressed	0 1 2 3
14	I found myself getting impatient when I was delayed in any Way (e.g., lifts, traffic lights, being kept waiting.	0 1 2 3
15	I had a feeling of faintness	0 1 2 3
16	I felt that I had lost interest in just about everything	0 1 2 3
17	I felt I wasn't worth much as a person	0 1 2 3
18	I perspired noticeably (e.g., hands sweaty) in the absence of high temperatures or physical exertion	0 1 2 3
19	I felt scared without any good reason	0 1 2 3
20	I felt that life wasn't worthwhile	0 1 2 3
21	I found it hard to wind down	0 1 2 3
22	I had difficulty in swallowing	0 1 2 3
23	I couldn't seem to get any enjoyment out of the things I did	0 1 2 3
24	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	0 1 2 3
25	I felt down-hearted and blue	0 1 2 3
26	I found that I was very irritable	0 1 2 3
27	I felt I was close to panic	0 1 2 3
28	I found it hard to calm down after something upset me	0 1 2 3

29	I feared that I would be "thrown" by some trivial but unfamiliar task	0 1 2 3
30	I was unable to become enthusiastic about anything	0 1 2 3
31	I found it difficult to tolerate interruptions to what I was doing	0 1 2 3
32	I was in a state of nervous tension	0 1 2 3
33	I felt I was pretty worthless	0 1 2 3
34	I was intolerant of anything that kept me from getting on with what I was doing	0 1 2 3
35	I felt terrified	0 1 2 3
36	I could see nothing in the future to be hopeful about	0 1 2 3
37	I felt that life was meaningless	0 1 2 3
38	I found myself getting agitated	0 1 2 3
39	I was worried about situations in which I might panic and make a fool of myself	0 1 2 3
40	I experienced trembling (eg, in the hands)	0 1 2 3
41	I found it difficult to work up the initiative to do things	0 1 2 3
42	I found myself getting upset by quite trivial things	0 1 2 3

CERTIFICATE OF ENGLISH EDITING


This is to certify the study conducted by Ms. A. Anarkali, II year M.Sc.Nursing, College of Nursing, Madras Medical College, Chennai - 600 003, on the topic "A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home, at Chennai" has been edited by me for English language appropriateness.

Signature : 
Name : M. DHANALAKSHMI
Designation : Asst. Professor
Dept. of English
Place : MMC, Chennai-03.

Seal : **M. DHANALAKSHMI, M.A., M.Phil**
Asst. Professor
Dept. of English
Madras Medical College
Chennai - 600 003

TRANSLATION CERTIFICATE

This is to certify that the tool used by Ms. Anarkali. A, M.Sc. Nursing II year, college of Nursing, Madras Medical College, Chennai – 03, on the topic “ **A study to assess the effectiveness of guided imagery technique in reduction of stress among elderly people in selected old age home, at Chennai**” is translated from English to Tamil and edited by the undersigned.


JOURNAL OF SCHOOL SOCIAL WORK
No. 8, (NEW 14), SRIDEVI COLONY,
7th AVENUE, ASHOK NAGAR,
CHENNAI - 600 083. *Jayachandran Naidu P* MA, MEd, DCP,
Cognito-Academic Consultant
Editor, Journal of School Social Work

Name : Jayachandran Naidu. P
Designation : Editor, Cognito-Academic Consultant,
Journal of School Social Work.
Place : Chennai - 83

GUIDED IMAGERY

Real art...expresses energy, life force, and has deep spiritual meaning that can help the viewer transform pain and suffering... the benefit of a well-designed health care setting is that it allows the patient to relax so that medications and therapies can be more effective”

Self-Introduction

Good morning I am doing my MSc. (Nursing) Mental health Nursing. As part of my degree I am conducting a research about the effectiveness of guided imagery technique in reduction of stress among elderly people. Today I will explain the benefits of guided imagery technique. By practicing this, it will be benefit for you and I request you all to cooperate with me.

Introduction about guided imagery technique

Guided imagery is a method of alternative medicine and relaxation of mind by positive thoughts to reduce stress or pain. It can be given by a trained person. Can be given one to one interaction or sometime in a group action. Guided imagery was first introduced by Hanscarl Leuner a German psychiatrist.

Meaning

Guided Imagery is a convenient and simple relaxation technique that can help quickly and easily manage stress and reduce tension in body. Its virtually as easy as indulging in a vivid day dream and, with practice, this technique can help to better access in inner wisdom -**Wikipedia (2014)**

What's involved?

With the help of an imagery tape, a professional helper or just one's imagination, those who practice guided imagery get into a deeply relaxed state and envision, with great detail relating to all of the senses, a relaxing scene. They may also imagine a 'wise guide' with them, answering their questions and asking them questions that they must ponder in order to get to a better place in their lives.

What are the pros?

Imagery can provide relaxation, insight and wisdom. It is a free stress relieving therapy and with practice can be done just about anywhere.

What are the cons?

Like self-hypnosis, it can take some practice to master autonomous guided imagery. Working with a professional therapist or even tapes to get to that point can be somewhat costly.

How does it compare to other stress reduction methods?

It is an excellent stress management option. It can be easier than exercise or even yoga for those with physical limitations. It has no risk of side effects like some medical and herbal therapies. Using it for simple relaxation is easy and can be done by just about anyone. It is similar to self-hypnosis in that getting into a deep state of relaxation and dealing with subconscious mind.

What is this therapy used for?

Because guided imagery is a mind-body therapy,

- ❖ Stress related health concern, including high blood pressure,
- ❖ Pain related to muscle tension,
- ❖ Insomnia
- ❖ Anxiety
- ❖ Depression.

- ❖ Associated conditions, such as skin rashes or irritable bowel syndrome are also amenable to guided imagery.
- ❖ Autoimmune disorders such as rheumatoid arthritis and crohn's disease and
- ❖ Useful to alleviate chronic allergies, hives and asthma.
- ❖ Post-Traumatic Stress

The Academy for Guided Imagery (AGI) classifies the therapeutic application of guided imagery into three categories:

- ❖ Stress reduction and relaxation
- ❖ Active visualization or directed imagery – for improving performance, changing behavior or influencing an outcome.
- ❖ Receptive imagery – in which words and images are brought to consciousness to explore and give information about symptoms, treatments, moods or illnesses.

Contra indications for guided imagery

There is no contraindications for using guided imagery, but it should not be given to the clients with

- ❖ Catatonic Schizophrenia
- ❖ Paranoid schizophrenia
- ❖ Hebephrenic schizophrenia
- ❖ Severe cardiac illness
- ❖ Organic Neurotic Cases
- ❖ Those not willing to participate
- ❖ a client is uncomfortable about using it for personal or spiritual reasons

Benefits of guided imagery technique

Many instances even 10 minutes of imagery can reduce blood pressure, lower cholesterol and glucose levels in the blood, and heighten short-term immune cell activity. It can considerably reduce blood loss during surgery and morphine use after it. It lessens head aches and pain. It can increase skill at skiing, skating,

tennis, writing, acting and singing; it accelerates weight loss and reduces anxiety; and it has been shown, again and again, to reduce the aversive effects of chemotherapy, especially nausea, depression and fatigue.

Because it is a right brained activity, engaging in it will often be accompanied by other functions that reside in that vicinity. Emotion, laughter, sensitivity to music, openness to spirituality, intuition, abstract thinking and empathy. Guided imagery have a direct effect on both the endocrine and nervous systems, which lead to changes in immune system function. It mobilizes unconscious and pre-conscious processes to assist with conscious goals. It can bring to bear much more of a person's strength and motivation to accomplish a desired end. It can be powerful and more and more so over time.

Principles of guided imagery

First principal: The Mind-Body Connection

To the body, images created in the mind can be almost as real as actual, external events. The sensory images are the true language of the body, the only language it understands, immediately and without question.

Second Principal: The Altered State

In the altered state, we're capable of more rapid and intense healing, growth, learning and performance. Even more intuitive and creative. In this ordinary but profound mind-state, brainwave activity and biochemistry shift. So our moods and cognition change.

Third principal: Locus of control

The third principle is often referred to in the medical literature as the "locus of control" factor. When we have a sense of being in control, that in and of itself, can help us to feel better and do better.

Because guided imagery is an entirely internally driven activity, and the user can decide when, where, how and if it is applied, it has the salutary effect of helping us feel we have some control.

The importance of relaxation

While anxiety, fear, stress, and emotional upset do not usually cause pain, these emotions can greatly amplify the pain signal and /or significantly reduce tolerance when they continue unabated over time.

When a patient becomes stressed and afraid that their pain is going to get out of control, the pain signal becomes increased which makes pain less tolerable and more difficult to handle. Teaching patients how to relax can help to calm their nervous system and often reduces or eliminates the amplification effects of anxiety and stress.

Conclusion:

Practice makes perfection. With practice, this will get easier; your imagination will be strong, and you will be able to enter a relaxed state more quickly.

சமூக பொருளாதார விவரங்கள்

1. வயது (வருடத்தில்)

அ) 60-65

☐

ஆ) 65 -70

☐

இ) 70 - 75

☐

ஈ) 75 வயதிற்கு மேல்

☐

2. மதம்

அ) இந்து

☐

ஆ) முஸ்லீம்

☐

இ) கிறிஸ்தவம்

☐

ஈ) மற்றவை

☐

3. திருமண நிலை

அ) திருமணமானவர்

☐

ஆ) திருமணமாகவில்லை

☐

இ) விவாகரத்து ஆனவர்

☐

ஈ) கணவரை இழந்தார்

☐

4. கல்வித் தகுதி

அ) படிப்பறிவில்லை

☐

ஆ) முதல் நிலைக் கல்வி

☐

இ) இடை நிலைக் கல்வி

☐

ஈ) மேல் நிலைக் கல்வி

☐

5. வேலை

அ) அரசாங்க வேலை

☐

ஆ) அரசு அங்கிகாரம்

☐

இ) தனியார் துறை

☐

ஈ) மற்றவை/ சுய தொழில்

☐

6. பொருளாதார உதவி

- அ) முதியோர் உதவித் தொகை
- ஆ) பென்ஷன்
- இ) பிள்ளைகளிடம் இருந்து
- ஈ) இவற்றில் எதுவும் இல்லை

☐
☐
☐
☐

7. குடும்பத்தில் உள்ள குழந்தைகளின் எண்ணிக்கை

- அ) 1 (அல்லது) 2
- ஆ) 2 க்கு மேல்
- இ) குழந்தைகளில்லை

☐
☐
☐

8. முதியோர் இல்லத்தில் அனுமதிக்கப் பட்ட முறை

- அ) டிரஃஸ்ட் மூலமாக
- ஆ) சுய விருப்பத்தின் பேரில்
- இ) பிள்ளைகளால்/மற்றவர் மூலம்

☐
☐
☐

9. பொழுது போக்கு

- அ) தொலைக்காட்சி பார்ப்பது
- ஆ) புத்தகம் படிப்பது
- இ) மற்றவர்களுடன் பேசிக்கொண்டிருப்பது
- ஈ) மற்றவை

☐
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☐
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10. இல்லத்தில் தங்கி இருக்கும் காலம்

- அ) ஓராண்டுக்குள்
- ஆ) 2-3 வருடங்கள்
- இ) 3-5 வருடங்கள்
- ஈ) 5 வருடங்களுக்கும் மேலாக

☐
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☐

ஆராய்ச்சி ஒப்புதல் படிவம்

ஆராய்ச்சி தலைப்பு : வயதானவர்களுக்கிடையே கற்பனை வழி காட்டி
நுட்ப பயிற்சி மூலம் மனைச்சுமையை குறைக்க
முதியோர் இல்லத்தில் ஆய்வு.

ஆய்வாளர் பெயர் : அனார்கலி. அ

பங்கேற்பாளர் பெயர்:

தேதி :

வயது/பால் :

- ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சுயநினைவுடனும் சம்மதிக்கிறேன்.
- ஆய்வாளர் மேற்கொள்ள போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்.
- எனக்கு விருப்பமில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் மூலம் அறிந்து கொண்டேன்.
- இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்துகொண்டேன். எனது உரிமைகள் மற்றும் கடமைகள் ஆராய்ச்சியாளர் மூலம் விளக்கப்பட்டது.
- நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன். எனக்கு ஏதேனும் உடல்நலகுறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்.
- நான் வேறு எந்த ஆராய்ச்சிலும் தற்சமயம் இடம்பெறவில்லை என்பதை தெரிவித்துக்கொள்கிறேன்.
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன். அப்படி வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆய்வாளர் கையொப்பம்

தேதி

பங்கேற்பாளர் கையொப்பம்

தேதி

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு : வயதானவர்களுக்கிடையே கற்பனை வழி காட்டி
நுட்ப பயிற்சி மூலம் மனைச்சுமையை குறைக்க
முதியோர் இல்லத்தில் ஆய்வு.

ஆய்வாளர் பெயர் : அனார்கலி. அ

பங்கேற்பாளர் பெயர்:

தேதி :

வயது/பால்

ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சம்மதிக்கலாம். இதில் பங்கேற்பதன் நோக்கம். இந்த ஆராய்ச்சியில் தகவல்களை தெரிந்து கொள்வதற்காகவும். அதனை பயன்படுத்துவதற்காக மட்டும் தான்.

இந்த ஆராய்ச்சியின் நோக்கம், வயதானவர்களுக்கிடையே மனைச்சுமையை குறைக்க கற்பனை வழிகாட்டி நுட்பப் பயிற்சியை பயன்படுத்தும் முறைகளை பற்றி கற்றுதருவது.

ஆராய்ச்சி மேற்கொள்ளும் முறை

இந்த ஆராய்ச்சியில் வயதானவர்களுக்கிடையே ஆய்வாளர் தயார் செய்த கேள்வி மூலம், பயன்படுத்தும் முறைகளை கற்றுதருவதற்கு முன்பு மற்றும் பின்பு அவருடைய அறிவுதிறன் மேம்படுவதை அறியலாம்.

இதனால் ஆய்வாளருக்கான பயன்

இந்த ஆய்விற்குப்பின் வயதானவர்கள் கற்பனை வழிகாட்டி நுட்பப் பயிற்சி மூலம் மனைச்சுமையை குறைக்கவும் முறைக்களை கற்றுத்தந்ததன் தாக்கத்தினை அறியலாம்.

இதனால் பங்கேற்பாளருக்கான பயன்

இந்த ஆய்வு மனைச்சுமையால் ஏற்படும் பின்விளைவுகளை தவிர்க்க, அவரின் அறிவு திறனை மேம்படுத்துகிறது.

ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும், உங்களின் சராசரி வாழ்கைமுறை, மருத்துவரின் ஆலோசனை மற்றும் சிகிச்சை முறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழுமனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகி கொள்ளலாம் என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் உங்களின் மருத்துவதகவல்களை பாதுகாப்பாக வைத்துக்கொள்கிறேன் என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும் போது, உங்களை பற்றிய அடையாளங்கள் வெளிவராது என்பதை உறுதி கூறுகிறேன்.

ஆய்வாளர் கையொப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி

தேதி

கற்பனை வழிகாட்டி நுட்ப பயிற்சி

நிலை 1: அமைதியான ஒரு இடத்தை தேர்வு செய்யவும்

அமைதியான ஒரு இடத்தை தேர்வு செய்ய முயலவும். அது ஒரு பூங்கா, காலியான அறை, அல்லது அலுவலகமாகக்கூட இருக்கலாம். பின்னர் இருக்கையில் நிமிர்ந்து நேராக அமரவும். தலை மற்றும் முதுகு நேராக இருக்க வேண்டும். கைகளை தொடைகளின் மேல் வைக்கவும். முட்டிகளை அருகருகே இணைத்து வைக்கவும். கால் விரல்கள் அருகருகே இருக்க வேண்டும்.

நிலை 2: தசைகள் தளர்ச்சி அடையும் பயிற்சி

ஒன்று : உங்கள் தலைப்பகுதி தளர்ச்சி அடைகிறது. கண்கள் தளர்ச்சி அடைகின்றன. கண் இமைகள் கனமாக இருப்பதாக உணர்கிறீர்கள். மூக்கு தளர்ச்சி அடைகிறது. உதடுகள் தளர்ச்சி அடைகின்றன. தாடை தளர்ச்சி அடைகிறது.

இரண்டு : கழுத்து தளர்ச்சி அடைகிறது. கழுத்து தசைகள் தளர்ச்சி அடைகிறது.

மூன்று : தோள்கள் தளர்ச்சி அடைகின்றன. வலது தோள் தளர்ச்சி அடைகின்றது. வலது கை விரல்கள் தளர்ச்சி அடைகின்றன. இடது தோள் தளர்ச்சி அடைகின்றது. இடது கை விரல்கள் தளர்ச்சி அடைகின்றன.

நான்கு : மார்புப் பகுதி தளர்ச்சி அடைகின்றது. மூச்சை மெதுவாக உள்ளிழுத்து விடவும். மார்புத் தசைகள் தளர்ச்சி அடைகின்றன.

ஐந்து : வயிறு தளர்ச்சி அடைகின்றது. வயிறு தசைகள் தளர்ச்சி அடைகின்றன.

ஆறு : இடுப்புப் பகுதி தளர்ச்சி அடைகின்றது.

ஏழு : தொடை தளர்ச்சி அடைகின்றது. தொடை தசைகள் தளர்ச்சி அடைகின்றன.

எட்டு : முட்டிகள் தளர்ச்சி அடைகின்றன.

ஒன்பது : கால்கள் தளர்ச்சி அடைகின்றன. வலது கால் தளர்ச்சி அடைகின்றது. இடது கால் தளர்ச்சி அடைகின்றது.

பத்து : பாதங்கள் தளர்ச்சி அடைகின்றன. கால் விரல்கள் தளர்ச்சி அடைகின்றன.

நிலை 3: கற்பனை வழிகாட்டி நுட்பப் பயிற்சி

நீங்கள் முழுவதுமாக தளர்ச்சி நிலை அடைந்த உடன் உங்களுக்கு பிடித்தமான சம்பவம், இடம் அல்லது நபரை கற்பனைக்கு கொண்டு வர வேண்டும்.

கடற்கரை உருவொளி மன அமைதிப் பயிற்சி

கடற்கரையை நோக்கி நடப்பதாக கற்பனை செய்து கொள்ளுங்கள்... அழகிய நீண்ட கடற்கரை...

உங்களுக்கு அலைகளின் ஓசை கேட்கிறது. கடலின் நறுமணத்தை நுகர்கிறீர்கள். காற்று ஈரமாகவும், வெதுவெதுப்பாகவும் இருக்கிறது.... இனிமையான குளிர்ந்த காற்று மரங்களின் இடையே வீசுவதை உணர்கிறீர்கள்.

அங்கே ஒரு நீண்ட பாதை.... கடலை நோக்கி நடக்கிறீர்கள்... மரங்களைத் தாண்டி வரும் போது குளிர்ந்த பளிச்சென்ற கடலின் நீல நிறத்தை எதிரில் காண்கிறீர்கள்..

தோப்பைத் தாண்டி நடக்கிறீர்கள். காலணியைக் கழற்றுவதாக கற்பனை செய்து கொள்ளுங்கள்... சூடான வெண்மையான மணற்பரப்பில் கடலை நோக்கி நடப்பதாக கற்பனை செய்து கொள்ளுங்கள்.

நீண்ட, அகன்ற கடற்கரை....கடலலைகள் கரையில் மோதும் சப்தத்தைக் கேட்கிறீர்கள்...கடலின் சுத்தமான உப்பு வாசம் நிறைந்த காற்றை சுவாசியுங்கள்...

கடலைப் பார்க்கிறீர்கள்... பச்சை கலந்த நீல நிறம் பளிச் என்று இருக்கிறது... கடலலை கரையில் மோதுகிறது... மீண்டும் கடலுக்கு திரும்புகிறது...

கரையைத் தொட்டு மீண்டும் கடலுக்கே திரும்புகிறது...கடலுக்கும் மணலுக்கும் மாறி மாறி வரும் கடலலையின் இசையை உணருங்கள்...

மணலில் நீரை நோக்கி நடக்கிறீர்கள்... மணல் சூடாக இருக்கிறது. உங்களுக்கும் வெப்பமாக உள்ளது... வெப்பம் தணிய நீங்கள் கடல் அலையில் கால் நனைக்க விரும்புகிறீர்கள்....

கடலை நெருங்கும் போதே நீர்த்துளிகள் முகத்தில் விழுகின்றன... கடலை நெருங்க நெருங்க கடல் மணல் ஈரமாகவும், அழுத்தமாகவும் இருப்பதை உணர்கிறீர்கள்..

கடலை மணலைத் தாண்டி உங்கள் காலருகே வருகிறது... திரும்பும்முன் கால் விரல்களிடையே புகுந்து செல்கிறது...

மேலும் கடலை நோக்கி முன்னேற முன்னேற அதிக அலைகள் கால்களைத் தொடுகின்றன... சூட்டைத் தணிக்கும் நீரின் குளுமையை உணர்கிறீர்கள்... மேலும் முன்னேறுங்கள்... சுத்தமான தெளிவான தண்ணீரை நோக்கி முன்னேறுங்கள்... நீருக்குக் கீழே உள்ள வெண்மணலும் தெளிவாகத் தெரிகிறது...

கடல் நீர்வெப்பம் தணிக்கும் அளவு குளுமையாக உள்ளது... குளிராக அல்ல...

விருப்பமிருந்தால் மேலும் முன்னே செல்லுங்கள்...

சில நிமிடங்கள் கடலை இரசியுங்கள்..... கடற்காற்றை இரசியுங்கள்....உங்கள் மனம் மேலும் அமைதி அடைகிறது... கூடுதல் புத்துணர்ச்சி கிடைக்கிறது... கரைக்கு வருகிறீர்கள்... நீர் விளிம்பில் நடக்கிறீர்கள்... கவலையற்ற நிலை....பதட்டமற்ற நிலை... மன அமைதி... உங்கள் ஓய்வு நேரம் இன்பமாக இருக்கிறது...

மணலில் ஒரு துண்டை விரிக்கிறீர்கள்.... துண்டில் சுகமாக அமர்ந்து நிம்மதியாக படுக்கிறீர்கள்... கடலைப் பார்க்கிறீர்கள்... இரசிக்கிறீர்கள்...கடலையை இரசிக்கிறீர்கள்... கடற்காற்றை இரசியுங்கள்... உங்கள் மனம் அமைதி அடைகிறது.... நீங்கள் மன அமைதியில் மூழ்குகிறீர்கள்... உங்கள் கவலைகள் கரைகின்றன...

நிலை 4: இயல்பு நிலைக்கு திரும்புதல்

நீங்கள் இயல்பு திரும்ப விருப்பப்படும் போது மெதுவாக மீண்டும் மூச்சை இழுத்து விட வேண்டும்.

பத்து : பாதங்கள் இயல்பு நிலைக்கு திரும்புகின்றன. கால் விரல்கள் இயல்பு நிலைக்கு திரும்புகின்றன.

ஒன்பது : கால்கள் இயல்பு நிலைக்கு திரும்புகின்றன. வலது கால் தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன. இடது கால் தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன.

எட்டு : முட்டிகள் இயல்பு நிலைக்கு திரும்புகின்றன.

ஏழு : தொடை இயல்பு நிலைக்கு திரும்புகின்றது. தொடை தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன.

ஆறு : இடுப்புப் பகுதி இயல்பு நிலைக்கு திரும்புகின்றது..

ஐந்து : வயிறு இயல்பு நிலைக்கு திரும்புகின்றது. வயிறு தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன.

நான்கு : மார்ப்புப் பகுதி இயல்பு நிலைக்கு திரும்புகின்றது. மூச்சை மெதுவாக உள்ளிழுத்து விடவும். மார்ப்புத் தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன.

மூன்று : தோள்கள் இயல்பு நிலைக்கு திரும்புகின்றன. வலது தோள் இயல்பு நிலைக்கு திரும்புகின்றது. வலது கை விரல்கள் இயல்பு நிலைக்கு திரும்புகின்றன. இடது தோள் இயல்பு நிலைக்கு திரும்புகின்றது. இடது கை விரல்கள் இயல்பு நிலைக்கு திரும்புகின்றன.

இரண்டு : கழுத்து இயல்பு நிலைக்கு திரும்புகின்றது. கழுத்து தசைகள் இயல்பு நிலைக்கு திரும்புகின்றன.

ஒன்று : தாடை இயல்பு நிலைக்கு திரும்புகின்றது. உதடுகள் இயல்பு நிலைக்கு திரும்புகின்றன. மூக்கு இயல்பு நிலைக்கு திரும்புகின்றது. கண் இமைகளை மெதுவாக திறக்கவும். கண்கள் இயல்பு நிலைக்கு திரும்புகின்றது. உங்கள் தலைப்பகுதி இயல்பு நிலைக்கு திரும்புகின்றது.

முடிவுரை:

உங்களுக்கு எப்போதெல்லாம் மன அமைதி தேவையோ அப்போதெல்லாம் இந்த மன உருவொளிக் கற்பனையைப் பயிற்சி செய்யுங்கள். இது எளிதில் கற்கக் கூடிய திறமைதான். மீண்டும் மீண்டும் எவ்வளவு முறை செய்கிறீர்களோ அவ்வளவு திறமை உங்களுக்கு ஏற்படும். திறமையுடன் கற்பனை செய்தால் மன அமைதி நிச்சயம்.

**கீழே கொடுக்கப்பட்டு உள்ளவற்றில் தங்களுக்கு ஏற்பட்ட
அனுபவங்களை நினைவு கூர்ந்து கீழே குறிக்கப்பட்ட இடத்தில்**

(√) குறியிடவும்

**மன அழுத்தம், மனப் பதட்டம் மற்றும் மனச்சுமையை அளவிடும்
அளவுகோல் (தாஸ் அளவுகோல்)**

வ. எண்	கேள்விகள்	ஒரு போதும் இல்லை (0)	சில நேரங்க ளில் (1)	அடிக்கடி (2)	எப்பொ ழுதும் (3)
1	முக்கியமில்லாத விஷயங்களுக்கு கூட மனக்கலக்கம் அடைகிறேன்				
2	எனது வாய் வறண்டு போவதாக உணருகிறேன்				
3	நல்ல எண்ணங்களை என்னால் அனுபவிக்க (முடியவில்லை என உணருகிறேன்				
4	சுவாசித்தலில் சிரமப்படுவதாக நான் உணருகிறேன் (வேகமான மூச்சு, உடல் உழைப்பு இல்லாத போதும் மூச்சு வாங்குதல்)				
5	என்னால் எதையும் தொடர்ந்து செய்ய முடியவில்லையே என்ற எண்ணம் ஏற்படுகிறது				

6	சிலசூழ்நிலைகளில் நான் அளவுக்கு மீறி செயல் படவேண்டும் என்ற எண்ணத்திற்கு ஆட்படுவதாக உணருகிறேன்				
7	எனக்கு நடுக்கம் ஏற்படுவதாக உணருகிறேன் (கால் வளவளத்து போதல்)				
8	எனக்கு இயல்பாக இருப்பதே கடினமாக உள்ளது.				
9	மனகலகத்தை உருவாக்கும் செயல்பாடுகள் (முடியும்போது அதிலிருந்து விடுவிக்கப்பட்டதாக உணரும் சூழ்நிலைகளில் நான் இருந்திருக்கிறேன்.				
10	என்னால் எந்த விஷயத்திலும் முன்னேற முடியவில்லை என உணருகிறேன்				
11	நான் மிக எளிதான செயல்பாடுகளுக்கு கூட கவலையடைகிறேன்				
12	நான் அதிகமான சக்தியை உபயோகிப்பதாக நினைக்கிறேன்.				

13	நான் வருத்தம் மற்றும் மனசோர்வு அடைவதாக உணருகிறேன்				
14	தாமதமான செயல்பாடுகளின்போது நான் பொறுமை இழந்து விடுகிறேன் (மின் தூக்கி, வாகன நெரிசல், காத்திருக்கும் நேரங்களில்)				
15	நான் மயக்கம் அடைவது போல உணருகிறேன்				
16	எந்த ஒரு செயலிலும் என்னால் ஆர்வம் காட்ட முடியவில்லை				
17	எந்த ஒரு செயலுக்கும் நான் தகுதி அற்றவளாக உணருகிறேன்				
18	நான் மிக எளிதில் உணர்ச்சி வசப்படுவதாக உணருகிறேன்				
19	உடலுழைப்போ (அ) வெப்ப நிலை மாறுதல் இல்லாதபோதும் கவனிக்கத்தக்க அளவு நான் உடல் வியர்த்து விடுகிறேன்.				
20	நான் தகுந்த காரணமின்றி பயப்படுகிறேன்				
21	என் வாழ்க்கை அவசியம் இல்லை என உணருகிறேன்				

22	நான் உணர்ச்சிகரமான நிலையிலிருந்து இயல்பு நிலைக்கு வர சிரமப்படுகிறேன்				
23	நான் விழுங்குவதற்கு சிரமப்படுகிறேன்				
24	நான் செய்த எந்த விதமான செயல்களிலும் மகிழ்ச்சி ஏற்பட்டதாக நான் உணர்வில்லை				
25	உடல் உழைப்பு இல்லாத நேரத்திலும் என் இதயத் துடிப்பை (அதிக இதய துடிப்பு, விட்டு விட்டு துடிப்பதாக) உணருகிறேன்				
26	நான் உற்சாகமின்றி துயரத்துடன் இருப்பதாக உணருகிறேன்				
27	நான் மிகவும் எரிசல் அடைவதாக உணருகிறேன்				
28	நான் கட்டுப்படுத்தமுடியாத திடீர் அச்ச உணர்விற்கு ஆளாகிறேன்				
29	என் மனதை பாதிக்கும் நிகழ்ச்சியில் இருந்து அமைதி அடைய சிரமப்படுகிறேன்				
30	எளிதான ஆனால் பழக்கம் இல்லாத வேலை செய்யும் போது				

	கூட தோற்றுவிடுவதாக உணருகிறேன்				
31	என்னால் எந்த விசயங்களிலும் ஆர்வத்துடன் செயல்பட முடியவில்லை				
32	நான் ஈடுபடும் காரியங்களில் வரும் இடையூறுகளை என்னால் பொறுத்துக்கொள்ள முடியவில்லை				
33	நரம்பு பதட்டம் அடைவதாக உணருகிறேன்				
34	நான் எதற்கும் பயனற்றதாக உணருகிறேன்				
35	நான் செய்யும் செயல்களை தொடர்ந்து செய்ய முடியாத நிலைமையை என்னால் பொருத்துக் கொள்ள முடியவில்லை				
36	நான் அதிகமாக பயப்படுவதாக உணருகிறேன்				
37	என் எதிர் காலத்தைப் பற்றி நம்பிக்கை தரும் எதுவும் இல்லை				
38	என் வாழ்க்கை அர்த்தமற்றதாய் தோன்றுகிறது				

39	நான் பதட்டம் உணர்வு வகை உணருகிறேன்				
40	நான் அதிர்ச்சி அடையும் முட்டாள்தனமான சூழ்நிலைகள் ஏற்படுமோ என கவலைப்படுகிறேன்				
41	எனக்கு நடுக்கம் ஏற்படுவதாக உணருகிறேன் (கைகளில்)				
42	எந்தக் காரியத்தையும் ஆரம்பிக்க என்னை தயார்படுத்திக் கொள்ள நான் சிரமப்படுவதாக உணருகிறேன்				